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IN SAVAGE AUSTRALIA



THE AUTHOR.

[Frontispiece.]

IN SAVAGE AUSTRALIA

AN ACCOUNT OF A HUNTING AND
COLLECTING EXPEDITION TO
ARNHEM LAND AND
DAMPIER LAND

BY

KNUT DAHL

PROFESSOR OF PISCICULTURE AT THE NORWEGIAN
COLLEGE OF AGRICULTURE, OSLO

WITH PHOTOGRAPHS AND DRAWINGS BY THE

AUTHOR, AND A FOREWORD BY

FRIDTJOF NANSEN



BOSTON AND NEW YORK:
HOUGHTON MIFFLIN COMPANY

1927

MADE AND PRINTED IN GREAT BRITAIN
BY THE HEREFORD TIMES LIMITED, HEREFORD, ENGLAND.

FOREWORD.

“ The call of the unknown ” appeals to all men, and many of our noblest deeds are due to its promptings. It urges us to seek the innermost secrets of nature ; it leads us on far travels to distant and unexplored regions of the globe, to the frozen ice-floes of the Pole and to the deep forests of the Tropics.

Early in his life my friend Knut Dahl heard this call of the unknown. When he was barely 22 years old it took him out on his venturesome travels to South Africa, and, further, to parts of Australia which were then very little known.

For two years he lived among the Australian savages, one of the most primitive races of the globe. He led a hunter's life, full of adventures and dangers, and returned to his native land with a wealth of experience and valuable observations, his large collections containing numerous species unknown to science, among these no less than twenty new vertebrates.

In this book Knut Dahl records his life and adventures among the remarkable and primitive savages of Australia, and his observations and discoveries in the Australian wilderness. He tells his tale simply, in the terse, crisp style peculiar to him, and he brings vividly before us every

incident, every scene. We share his life in its savage surroundings, we sit at his camp fire in primæval forests. He is a true descendant of our northern race. His powers of observation are those of the born investigator, but at the same time (and this lends no little charm to his narrative) he has the open and wondering eyes of the child.

FRIDTJOF NANSEN.

Lysaker,

6th April, 1926.

INTRODUCTION.

In 1893, when I was a quite young student of natural history, the Zoological Museum of the Norwegian University gave me the opportunity of going on a collecting expedition to remote lands. The funds were liberally provided by a Norwegian gentleman, now deceased, Mr. Joergen Young. A friend from the days of my boyhood, Mr. Ingel Olsen Holm, accompanied me in the capacity of taxidermist.

After a year's visit to Zululand I went to Australia, intending to explore the fauna of the northern and north-western parts of that continent.

Returning home from another two years of adventure in these lonely parts, I wrote an account of my travels, which for various reasons appeared only in the Norwegian language. A new edition of this having recently been called for, the publishers of the present volume expressed a wish to present it to English-speaking readers, a request with which I am happy to comply.

In preparing this English edition I am greatly indebted to my friends Mr. H. T. Sheringham and Mr. J. Arthur Hutton for kindly supervising my translation and seeing the book through the press.

KNUT DAHL.

Oslo,

May, 1925.

A NOTE BY THE 'SUPERVISORS.'

We so describe ourselves because Professor Knut Dahl has himself suggested this honourable title for us in his Introduction. But it constrains us to emphasize the fact that our supervision has really been a very small affair, a matter chiefly of 'dotting' and 'crossing,' and similar little technicalities. To us, who have both had previous happy experience of the author's remarkable command of the English language in connection with a specialized branch of sport and natural history—Knut Dahl is one of the great names in salmonology—the slight demand on our services has been no cause for surprise.

But we think that the wider public to which this vivid narration of adventure, research, and primitive life is bound to appeal ought to realise that Knut Dahl is *his own translator*, a point which might not otherwise be quite apparent. As 'supervisors' who would have regarded much editing as presumption we consider that we are justified in characterizing this as a wonderful linguistic achievement which will not easily be matched in the annals of authorship. That he is also his own illustrator is perhaps less remarkable, but it should be realised too. It will not lessen the admiration which English readers will feel for him and his work as a whole.

H. T. S.

J. A. H.

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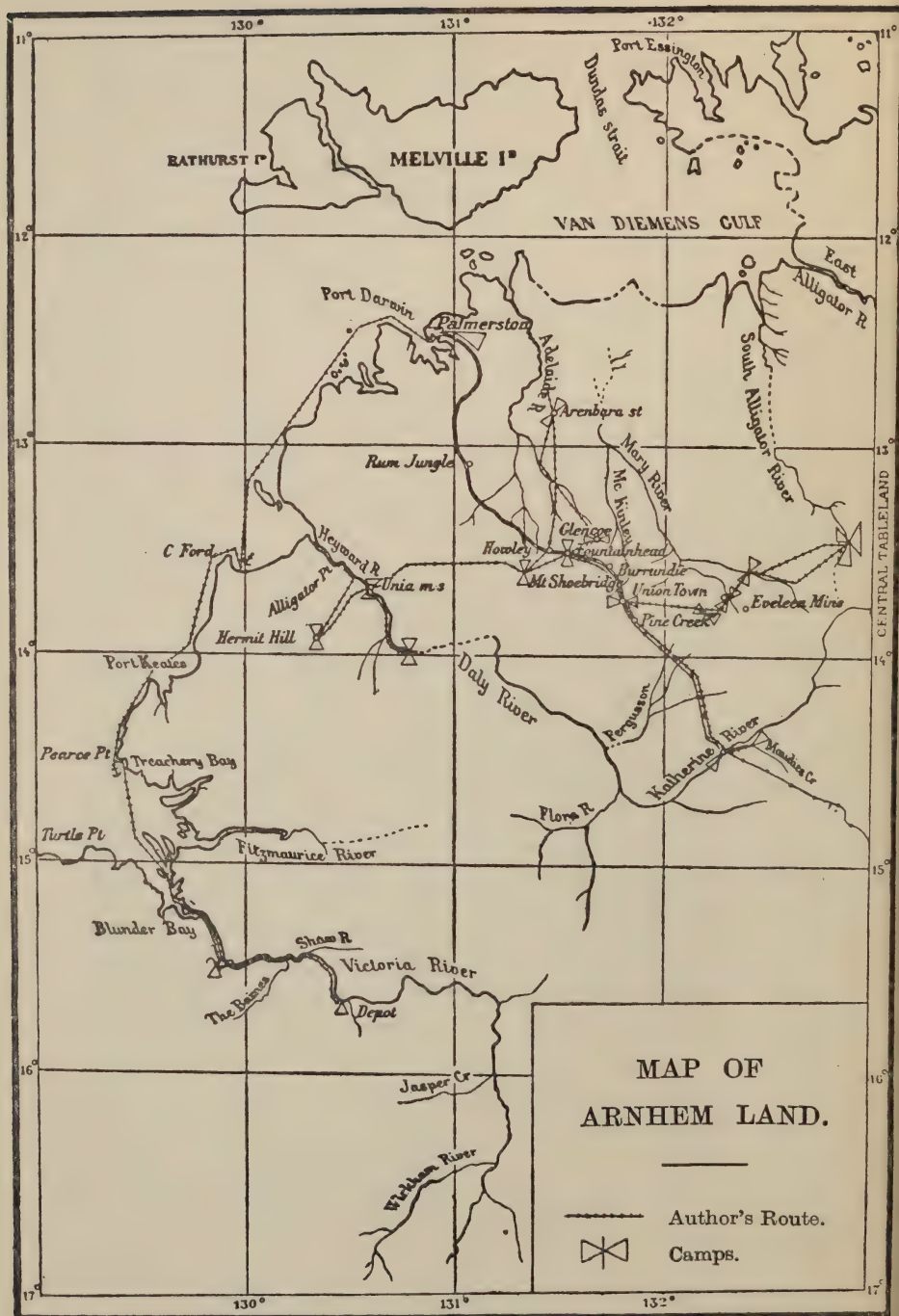
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IN SAVAGE AUSTRALIA.

CHAPTER I

THE VOYAGE TO ARNHEM LAND

Having spent a year big game hunting in South Africa, my taxidermist, Mr. Ingel Holm, and myself boarded a sailing vessel in Port Natal bound for Australia.

After 45 days' sailing we landed at Port Adelaide in the colony of South Australia in the middle of May, 1894.

My intention was to explore the fauna of Arnhem Land, the northern peninsula of the Australian Continent, situated between the Gulf of Carpentaria and the Indian Ocean. As this region then belonged to the northern territory of South Australia, I presented my credentials to the Governor of South Australia and various other officials in order to obtain advice and information. Also I had to complete my equipment before going north, where conditions then were exceedingly primitive. Among other things I bought the necessary saddles and pack-saddles, had my firearms overhauled, and finally bought a light 12 foot dinghy for use on the navigable rivers in Arnhem Land.

We then proceeded *viâ* Melbourne to Sydney and in the latter town shipped in one of the few liners which in those days frequented the lonely shores of Northern Australia. In the first days of June we passed the Torres Straits, crossed the Gulf of Carpentaria and rounded the northern promontories of the Australian Continent.

On the 4th of June we anchored in the evening in the entrance to Van Diemens Gulf. The difference between high and low tides may in these waters amount to about 40 feet, and during the night the large liner lay high and dry on a limitless mud-flat.

Round about us we suspected low wooded horizons, and the breeze had a spicy tang due to distant forests of eucalypti.

The next day we steamed along low shores showing whitish rocks under a low bronze-green forest line. A bay cut deeply into the land, which appeared wonderfully sunny, clear and fresh. We had glimpses of houses, low and broad, scattered over a rocky bluff. It was Palmerston or Port Darwin.

Having brought our traps up to the town and obtained quarters in the North Australian Hotel, we had to go down to the harbour again to secure our dinghy. The vast variation between ebb and flood tide (30—40 feet) made this imperative. We reached the town again towards evening. The town was very small, and quaint according to our standards. Most of the squares were devoid of buildings and the grass grew tall and coarse between a stunted vegetation of low dwarfed gum-trees and screw-palms. Here and there the grass was on fire. Large areas in the middle of the town were bare and blackened by the fire, and the burnt smell, so well known from Africa, filled the air. The traveller in southern lands gets finally to like it.

In the evening I shouldered my gun and went out to look for birds. I had not far to go. The forest had the appearance of poverty. But birds, new and unknown to me, were to be seen flitting softly and quietly. Some slate blue and white birds were sitting in some high tree-tops. Now and again they would circle around, somewhat after the fashion of swallows, and then again perch in the trees, twittering softly. I stalked and shot one. It dropped stone dead to the blackened earth, a spot of red blood like a gem on its white breast. And the queer unfamiliar forest around me was filled by the cooing of a small pigeon sitting somewhere among the thin slender stems which formed as it were a filter for the slanting golden rays of the low sun.

Very soon the sun went down. It seemed to drop through the cloudless sky. Only when the sun reached the horizon of the Indian Ocean the gorgeous colours of the tropical sunset sprang out of the western sky. The

sun set in colours of flame and blood until the glowing disc seemed to hang half submerged in the far-off edge of the ocean, which shortly appeared to extinguish it like a red-hot iron. You could almost hear the sizzle.

We had plenty of work in Port Darwin before we could begin our travels. I presented my credentials to several people and obtained invaluable assistance.

First of all I called upon the Resident Commissioner, Mr. Chas. Dashwood, who received me very kindly and rendered me every assistance in his power. The Government Secretary, Mr. Nicolas Holze, who was also a botanist, gave me a welcome which I valued greatly. The Inspector of Police, Mr. Foulsche, one of the veterans of the territory, assisted me very much and gave me a lot of useful information. His son-in-law, Mr. H. W. H. Stevens, also received me most kindly and did a great deal for me. Altogether I received a measure of hospitality and friendship which will always remain a happy memory with me.

In the south I had met a certain Father McKillop, chief of the Jesuit mission "Uniya," on the River Daly, and he had promised to provide temporary quarters for us on his mission station, where he himself would also be returning shortly. Accordingly I arranged to send our heavy things, our boat and sufficient provisions, down to the Daly River in a Chinese junk which plied a sporadic trade between Port Darwin and a copper mine on the River Daly.

Also I took train to the station at Fountainhead, and on the Glencoe cattle depôt bought five horses, which were left there until we were ready to start overland for the Daly. On the recommendation of Inspector Foulsche I also engaged a black horse-boy whose native name was "Gilberi," but who generally answered to the name of Tommy. Mr. Foulsche described him as a great rascal who had often been in the hands of the police, but he was said to be clever and to have a considerable knowledge of English, being also a tolerable cook and a fair hand with horses. I left him at Glencoe with the horses.

For various reasons I wanted to await the return of Father McKillop, and this waiting time was spent in

collecting round Port Darwin and gaining some experience of the conditions and nature of the country. Primeval forest surrounded the town, and the animal life of this virgin wilderness met one as soon as one lost sight of the houses of the little town. No game laws limited your shooting. You enjoyed a liberty as unfettered and unlimited as were the plains and forests of this vast land.

The country we intended to explore was wild and primitive. In the rocks along the coast, where the sea in the beginning of time had washed out caverns, there was a stunted bush vegetation where thickets of the rattan palm very often limited one's progress. But further inland you met the forest, stunted at first, then grand, enormous. The size of the trees was not very remarkable. The *extent* of the forest land was the main feature. The forest consisted mainly of large eucalypti of various species. It was fairly open and you could see far. The ground was generally flat or undulating, and, wherever you turned, the look of the forest was exactly the same. Only straight mostly white stems in a limitless vista, a canopy of scanty leaves overhead, and a burning sun. For hundreds and hundreds of miles you may ride through this forest, straight into the heart of the Continent, without noticing much change. You meet smaller plains now and then, you meet mountains and ridges, but the enormous forest stretches ever onwards. In fact, the whole of Northern Australia is, as it were, covered with a scanty canopy of the blue-green leaves of the forest. And under this canopy live only birds and wild animals and savages of the forest.

Now and again solitary white men have travelled through these woods. But the impression left on the country might be compared to their tracks, which were soon filled by the sand. As soon as you got ever so little away from the few outposts of civilisation you heard no sound of the white man's axe, saw no smoke rise from his chimneys. About 30 years ago the transcontinental telegraph line was built from Port Darwin to Adelaide. Gold was found along the line, a "rush" followed, and to procure meat a few cattle-stations were established. Some plantations were started. Everything looked promising and a railway 140 miles long was built from Port Darwin

to Pine Creek. Then the failures began. The mines faded out, most of them ; the cattle died ; the plantations were a disappointment, and the people left.

Now the railway was there. And outside this railway and its immediate surroundings there were practically no people. One might step out of the train, take a horse and ride more than 300 miles to the shores of the Gulf of Carpentaria without seeing the track of a white man. To the west the forest was just as lonely and uninhabited until you met the Indian Ocean. Only on the Daly River lived some missionaries and a few Chinese miners.

From the train you never saw cultivated fields with houses and the women and children of white men. You saw only forest, and forest and plains, and forest again ; and here and there you would see hordes of naked savages, a prehistoric race, yahooing and brandishing spears and clubs. At long intervals you passed a mine or a railway-man's bungalow, close to the track.

The colony was at that time rather on the decline. The reason for this was mainly that the mines—chiefly gold and tin mines—had not turned out as well as had been hoped. Cattle raising proved much more difficult than was expected. The climate was also very unhealthy, and it proved difficult for Europeans to exploit the country.

But in the days of the gold rush and while the railway was building, thousands of Chinamen of the lowest class had poured into the country as workers. When the railway was finished the Chinamen remained. And from that time it has been evident how difficult it is for the white man to compete with yellow labour. The Europeans had given way step by step and the Asiatics had gained a very good foothold. The mines, the main industry of the country, were almost all in the hands of Chinese, or let to Chinamen who worked them with Chinese labourers. The Chinamen made them pay where this had proved impossible under European management and with European labour. Where the European found it useless to cultivate the soil, the Chinaman made a garden, which, well watered, yielded good crops. Along the coast, where fish were abundant, Chinese fishermen found a living, and Chinamen had also

made a start in the cattle business. Even the pearling, which was mainly carried out by European vessels, employed Asiatic or coloured crews. In fact, the territory reminded one more of a little Asia or China than of a European colony.

The population of the northern part of the territory consisted at that time of little more than 300 white people and between 4,000 and 5,000 Chinamen and other Asiatics. In Palmerston lived about a couple of hundred whites and about 3,000 Chinamen. The population of the interior was thus very scanty and was mainly distributed round the stations on the railway line.

Arnhem Land at that time provided a good example of the inequality in the competition between Chinamen and white men in a tropical land. A walk through the streets of Palmerston was very striking. The European part of the town was small and very placid and quiet. The few business people and officials in the service of the Government were apparently in no hurry over their duties and adopted the cool and indolent habits peculiar to the majority of white men in tropical towns. Little or no life appeared in the streets, everybody knew everybody else, and the Resident Commissioner was generally mentioned by his Christian name.

Chinatown, on the other hand, was a welter of life and activity. The very air smelt of business. You heard, saw and felt nothing but business. One had a feeling that the people one saw thronging the shops and streets, who bought and sold, and, busy as ants, carried on their trades, belonged to a race which slowly and securely was gaining opulence and power. In Palmerston Chinatown one might fancy oneself in a modest business quarter of one of the towns of the Far East. Only late at night did the business life of the street cease. Then crackers were burnt in honour of the gods or to scare away devils, and red tapers were lit in front of the houses. And large gongs and drums were heard throbbing in the Temple.

And in the light galvanized iron houses sat Chinese families, men with wives and a flock of pretty little slant-eyed children. They were happy. They had religion, sympathy and unity.

But the European of Palmerston had very often no home, only a house; and the poor bachelors or grass-widowers sat lonely in their houses, or drank at the public houses, deploring the fate that had left them stranded on this barren coast.

And through the grave stillness of the forest night which enveloped the little town you could hear the hoarse chant from the camp of the aborigines and see the red reflection of their fires under the tree-tops.

These were the main features of the little human community, which, like a thin wedge, appeared driven into the virgin forests of this mighty and age-old Continent.

CHAPTER II

THE ABORIGINALS OF NORTH AUSTRALIA.

On our short excursions round Port Darwin we gained a first acquaintance with the nature and the aborigines of Australia. Both were strange, and unlike anything else a European has ever seen. In fact, everything in this country impresses one as strange and unintelligible—as long as one is unfamiliar with the reasons for this strangeness.

As early as the beginning of the Tertiary epoch Australia was separated from the other Continents of the world, and for almost a million of years this vast island has preserved the main features of the primitive character peculiar to the plant and animal life of that distant age. Everything in it is “old-fashioned”—it is as though it had stopped in a stage which the rest of the world has long ago passed. The tree ferns, the *Casuarinas* or tree-formed *equiseti*, the primitive conifers (the *Araucariaceae*), the old blue-green foliferous trees, in short the entire plant world, is of an ancient type.

And the animal world is no less archaic. It takes one back to distant eras in the evolution of animals, when the first mammals developed and still had much in common with birds and reptiles.

This ancient character of the fauna is most obvious among the mammals of Australia. We here meet the most ancient mammals known to science, the platypus and the anteater (porcupine), which both lay eggs. We find the marsupials, which are near allies to egg-laying mammals, inasmuch as their young are born in very early stages of foetal development. And this marsupial fauna is highly developed and differentiated. It has, as it were, created its own world. The distribution of functions, or rather the methodical exploitation of natural possibilities, which in other parts of the world has been

instrumental in dividing the mammals into insectivores, carnivores, monkeys, grass-eating ungulates, etc., has also specialised and diversified the marsupials.

Australia has its mole, but a marsupial mole. We find carnivores—the marsupial “weasels” (*Dasyuridae*)—large and small. We find animals which are monkey-like in their habits, but they are marsupial monkeys (the phalangers); and the grass-eaters are represented by the kangaroos, some as large as a man, others no bigger than a mouse. A multitude of species developed through the enormous isolation of the Continent.

Only a few of the mammals are of foreign and later origin. A few bats have been able to immigrate. A few rat-like rodents, for instance the *Coniluridae*, have become settlers.

And finally there is the red dog or wolf, the dingo, which perhaps arrived in the company of man.

How far the history of man goes back in the evolution of this Continent is subject to widely diverse opinions. But it is safe to conjecture that the aborigines of Australia have never developed from the fauna, which has been and is peculiar to Australia. Like the few mammals of strange origin they must have immigrated—though *when* is as yet an open question. But the aborigines of Australia must have inhabited this island for thousands and tens of thousands of years and must have partaken of and been marked by the enormous isolation of the Continent. Their build, their nature, their simple and primitive life bear witness to this.

Among living races few if any parallels will be found. Recourse must be had to finds and excavations of very distant ages in order to find a human race comparable with the Australian aboriginal.

From the time of the glacial epochs of Europe we now possess a number of discoveries of human remains which enable anthropological science to form an opinion on the anatomical peculiarities of the men of those ages and on his level of civilisation.

As is well known, science generally recognises two distinct races of glacial man. The one is the Neanderthal race or the Moustier Man. The other is the Cromagnon

race or the Aurignac Man. Both have long skulls. Moustier Man shows an exceedingly primitive skull; in fact, the lowest type of human skull known in detail. A low forehead, an enormously prominent snout-like face, a receding chin and enormously strong jaws produce a type of a low, animal character.

The Aurignac Man has a distinctly more nobly shaped skull. With a higher forehead, a straighter face, a strong jaw with a better chin, he reminds one more of modern types of skulls.

The Neanderthal race—or races—inhabited Europe throughout a very long period, the duration of which is the subject of varying opinions, but which by some investigators is placed at 140,000 years (from about 180,000 to 40,000 years before Christ).

The Cromagnon race followed the Neanderthalers and were possibly to some extent contemporary. They are generally considered as the ancestors of the men of the subsequent stone ages.

In Neanderthal man we observe a very primitive treatment of the material of his stone implements; generally a very rough chipping of the flint.

In the Cromagnon man the methods of treating stone material are far finer, improving largely as the millenniums pass. Also we find considerable creative art, first represented by sculpture, later on, for instance in the Magdalen period, represented by splendid rock paintings.

If now we consider the aboriginals of Australia we observe that in many respects they represent as it were a type between the two primitive races of Europe.

In the accompanying plate are shown a well-known skull of a Neanderthal man, and, below this, one of my skulls from Arnheim Land. It is, I think, at once obvious that this skull presents many points of likeness to the Neanderthaler. The brutal traits are not so prominent. But they are there and distinguish the skull widely from the Cromagnon type and from modern Europeans.

If we consider the stone implements of the Australian we notice great variation in the treatment of stone. We find, in fact, all variations between the coarse treatment of stone peculiar to the Neanderthaler, and the finer



UPPER : NEANDERTHAL SKULL, FROM LA CHAPELLE
AUX SAINTS. (*From a plaster cast in the Anthropol. Mus., Oslo
University.*)

LOWER : SKULL OF WOLNA TRIBE, ADELAIDE RIVER,
ARNHEM LAND. (*K. Dahl, 1894. In Anthropol. Mus., Oslo
University, Cat. No. 957.*)

elaboration of flint noticeable in the implements of Cromagnon man, which, particularly in the Magdalen and Solutre epochs, assumed very fine shapes. Among the natives of Arnhem Land one finds only the coarse treatment of the stone. From other parts of Australia, however, I collected stone implements—spear heads—which are far more finely treated, as will be seen from the little collection of spear heads photographed in their natural size in the plate facing page 14.

In other respects also the Australian occupies an intermediate position. So far as we know, Neanderthal man developed no sculpture and no pictorial art, whereas the Cromagnon people were great artists. Their sculpture, and especially their rock paintings in the Magdalen period, show the Cromagnon artists to have been clever and observant draughtsmen of a comparatively high standard. The Australian aboriginal is also a crude sculptor and paints on the rock as well, but his drawings are rougher and do not reach the high level of the drawings of the Cromagnon painter (see Chapter X).

For these reasons life among the savage Australians is fraught with a peculiar interest for the cultivated European. He there meets a living human type, anatomically and culturally at a level which in the main represents the level of the earliest human societies known to archaeological science. But while the archaeologist must arrive laboriously at his conclusions by inference, in Australia we meet prehistoric man in the flesh. That is the interest of travel in Australia. Life among these aborigines becomes a series of revelations of the life of pre-historic man, a continuous insight into the human society of very distant ages.

What I saw and experienced among these people will in the main be told in the following chapters. As a guide for the reader, however, a short account of the most prominent peculiarities of the North Australian aborigines may be useful.

The first and main fact regarding these people is the amazing simplicity of their life and of their whole apparatus of life. They roam through the forest, existing on the roots of the soil and on such animals as they can capture.

The arms and implements which they have invented are very few. Their necessities are also very few. They do not understand agriculture. They do not make clothing. Cattle or other domestic animals are not kept, excepting the half-tame dog—the dingo. Houses or permanent habitations are unknown. The earth is their bed and the heaven is their roof, as long as the dry season lasts. In the rainy season they resort to mountain caves or build a temporary shelter from bark and twigs. Free, unfettered, like herds of apes, they roam the gigantic forest of Arnhem Land.

The physiognomy of the Australian aboriginal is in accordance with the low type of the skull. The low forehead with the prominent lowering brow, the protracted snout-like mouth region and the receding chin impart a wild-animal expression to the face. In men as well as in women the faces often remind one of monkeys.

The structure of the body is slender. The muscular system, especially those of the torso and arms, is very well developed. The legs are slender, in women often very thin. Men walk turning their toes out ; women are almost always a little in-toed.

Several characteristics are faintly reminiscent of the monkeys. Thus the big toe is very mobile, and smaller objects, such as stones, sticks, spear-shafts, etc., are easily lifted between the big and the second toe, and this toe-grip is almost invariably employed to pick up such objects. They do not stoop. The thumb often appears weak. In gripping round branches or sticks very often it is not used at all. In gripping or picking up smaller objects, some individuals do not use the points of thumb and forefinger, but they use the thumb and the side of the nearest joint of the forefinger, just as monkeys do.

The hair covering is comparatively luxuriant. The hair on the head is generally kept short by cutting or burning it. This applies to men as well as to women. In some tribes (for instance on the Victoria) both sexes wear very long hair.

Notwithstanding the animal expression of the face, the appearance of the Australian aboriginal is not altogether repellent. The wild and free animal beauty of these

people, the springy slenderness of body, the perfectly trained muscular system, tend to dispel the first impression of aversion and apprehension which the low features impart to the mind of civilised man. The splendid blue-white teeth of the strong mouth, the silky texture of the brown skin, peculiar to the healthy wild Australian, enhance the impression of pleasure which one soon experiences in contemplating these children of nature.

The weapons, implements and ornaments of these people are few, simple and primitive, and European influence has altered them very little. They still live in the stone age, and the iron of the European has not replaced stone and wood to any extent as material in their weapons. The original stone axe is partly replaced by the light iron tomahawk; some old broken knife may be altered and used as a chisel. But in the main they seem to prefer stone and wood.

The only weapon possessed by the North Australian aboriginal is the spear, which is to be met with in many types and shapes, some of which are represented in the drawing on page 49. The shaft is commonly made from thin bamboo and is from two to three yards long. The head may simply be a piece of hard or fire-hardened wood, and the foot-long wooden head may be provided with a number of wooden barbs. In fish spears often two or three of these heads are lashed together in a bunch. The most perfect and also the most dangerous head is, however, the stone spear point, which is shown in the above-mentioned illustration. These heads are fixed to the shaft by means of wax and resin.

Lighter and shorter spears or throwing-arrows are also made from reeds provided with wooden points.

Neither the spear nor the throwing-arrow is thrown directly with the hand, as they are too light and flimsy for this. The spear is thrown with a sword-shaped throwing stick, provided at its end with a side spike for the hollow end of the spear. By means of this throwing-stick—generally termed *woomera*—the arm throwing the spear is, as it were, lengthened, and the spear is propelled with tremendous force, as with a sling.

The spears are essentially fighting arms. In peace

time they are also used for fishing and in the hunting of large mammals and reptiles.

In the making of these weapons they employ knives which are simply primitive chisels. Very often they use the sharp edges of mussel shells or the teeth of the Dugong without any preparation. But they also often use small chisels made from stone or from thick pieces of shells ground to a fine edge. These primitive tools, however, are always used as *chisels*, and this is the case in all the woodwork performed by the aborigines, which invariably has the peculiar rough chiselled surface that, for example, is to be seen in the rare pieces of woodwork from the later stone age which have been found in Danish peat-bogs.

The head of the stone axe is generally longish and lentil-shaped, being made mostly of granite with a roughly rounded edge, ground with sand. It is fixed in a wooden hoop which is lashed round the head, embedded in wax and resin. Both ends of the hoop are lashed together and used as a handle.

The main ornament consists in painting the body with ochre or chalk. Also they make use of a rough and primitive tattooing, cutting certain patterns in the skin. These cuts are kept open for some time until large shining callosities are formed.

They also make bracelets, brow-bands, necklaces, etc., from fibres, grass, kangaroo teeth and sea shells. These latter are also largely used as pendants. Belts made of wood and, above all, from human hair are very much in use.

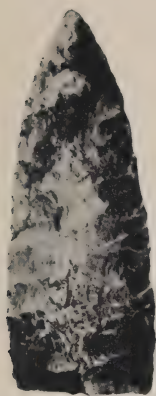
Baskets and bags for collecting food are made by the women, who are very clever and expert basket-makers.

Their only musical instrument is the primitive horn, a hollow bamboo stick, about 30 inches long.

The equipment of the native usually includes a fire-drill, but this instrument is often made at the moment it is required.

The natives of Arnhem Land also possess boats, long dug-outs made by burning out tree-trunks; but many of the aboriginal tribes of Australia are ignorant of the use of them.

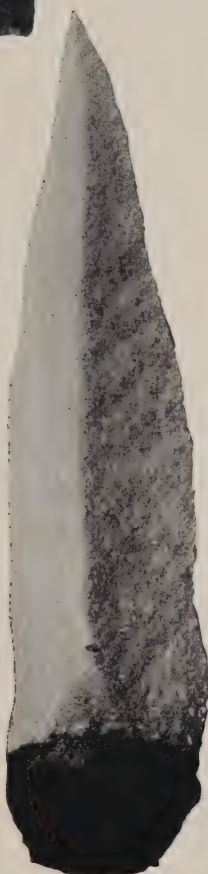
Broadly speaking, these are the main possessions of



1.



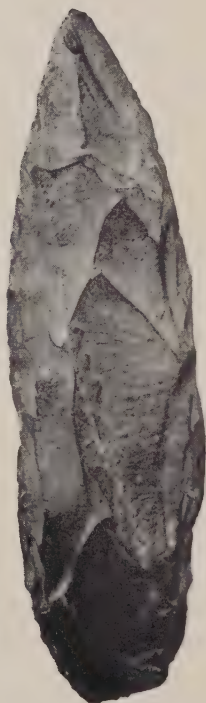
2.



3.



4.



5.



6.

STONE SPEAR-HEADS.

1. Flint head from the Roper River. 3. Head made from bottle glass, Roebuck Bay. 2, 4, 5, 6. Heads from Arnhem Land.

these people ; but they are curiously independent of many of them. Thus any sharp object will serve as a knife to cut up an animal for food, or the native will simply bite it open. A sharp stone grasped in the hand will at a pinch serve as an axe in opening a hollow tree.

Dotted about in small tribes these people form the scanty population of the forests of Arnhem Land. The tribal division is one of the most remarkable features among these people. The tribes live in complete isolation. Their intercourse is strictly limited and their isolation is so thorough that one might be justified in regarding them as different races, and not as various components of the same race. Not only have tribes who live close together entirely different languages—so different, indeed, that they have great difficulty in understanding one another and have to employ interpreters—but one also finds surprising differences in build and general appearance among tribes who are geographically not very distant. It would be of great interest to study these variations more closely from the anthropological standpoint before it is too late.

During my stay in Arnhem Land I came across the following 13 tribes in the western part of the peninsula :—

Wogait, from the Daly River mouth towards Port Darwin.

Tjerait, Pongo-Pongo and Mollak-Mollak along the lower course of the Daly.

Dim-Dim, the Hermit Hill-tribe and the Dilik, south of the Daly River.

Wolwanga, from the middle course of the Daly and in the mountains towards Adelaide River.

Wolna, at the Adelaide and Mary Rivers.

Warai, from Mount Shoebridge to Central Tableland.

Agigondin, in the Central Tableland.

Agoguila, at the Katherine River.

Larrikia, in the vicinity of Port Darwin.

The limits to the territories of these tribes were very difficult to ascertain in detail, and the borders were probably no longer sharp and well defined. I consider it also highly probable that the present number of individuals in the tribes has not necessitated any sharp territorial

limits. None of these tribes could then possibly comprise more than a few hundred individuals at most. One might travel for days and weeks through the forest without meeting more than a few natives; only in specially rich places or during their international meetings or *corroborees* might one meet them in greater numbers.

During the greater part of the year the tribes were split up in families, which moved and flitted in accordance with the seasonal flourishing of the flora and fauna upon which they depended for their living. They needed plenty of room, for any particular spot could yield them sufficient food only for a short time.

Men, women and children, perhaps followed by old parents or young relatives, roam through the forest. Their only means of existence are the plants they can find and the animals they can kill. They are not hunters in our sense of the word; they are gatherers, catchers and capturers.

At sundown they make for water, throw their prey and their poor belongings on the ground and light a fire. In cases of extreme necessity the fire is produced by means of the fire drill, which is laboriously twirled between the hands; but the common practice is for the women to carry a firebrand all day, which is constantly renewed by means of small fires.

Having roasted the spoils of the chase on the coals of the camp fire, the food is torn to pieces, distributed and eaten with animal appetite. Then each one makes his own small fire, coils up on the ground and sleeps until awakened by the sun.

As soon as they feel hungry they begin the day's work of procuring food. If the hunting ground is good and a stay has been decided on, their few belongings are left in the camp and the people distribute themselves through the forest, looking for food. Men walk by themselves, women by themselves, small children and girls follow the women. The older boys follow the men.

The work is divided up. The most important part—that is the gathering of the plant food—rests with the women. This is their main and staple food, but the bill of fare is very varied.

Above all other plants they depend on the yams, especially the gigantic *Amorphofallus variabilis*, which burns the mouth cruelly when eaten raw, but which is very good when well cooked. The batata-like *Dioscorea teresversa* is eaten raw as well as roasted. The fruit of water-lilies, and the stalks and roots of these plants, are plucked by swimming and diving in the lagoons. A number of stone fruits (*Terminalia* and *Eugenia*) are gathered in certain seasons. The fruit of the screw-palm, young shoots of palms and bamboos, and all brittle and salad-like plant shoots are utilised. Even poisonous fruits, like the fruit of the *Cycas media*, somewhat resembling the tree ferns, are soaked in water for five days and then baked to a sort of bread, which tastes good, but smells like manure.

The women are experts at all this gathering of plant food. In digging for yams they use a pointed stick, generally manufactured to meet the immediate want. In certain tribes they chop off the left forefinger at the second joint, in order, according to their own explanation, to make the hand more pointed and better suited for digging. This is the more interesting, when we remember that the rock paintings of the Magdalen period in the caves of Northern Spain show that a similar mutilation was also practised among the people of the European glacial epoch.

The hunting, or rather the catching, of animal food is the duty of the men. Accompanied by more or less grown-up sons, the men range slowly through the forest. Their knowledge concerning all the animals of the forest is very great, and these daily wanderings are a permanent and efficient school for the young savage.

The dwellings of all burrowing animals are examined. Snakes, lizards, bandicoots and all smaller mammals living in burrows are dug out and killed. The men dive in the lagoons for turtles and even for smaller crocodiles. Birds' nests are robbed of eggs or of young. Many of the smaller mammals of Australia and also lizards and snakes live in hollow trees, which are consequently subjected to minute examination. This is where the main use of the axe comes in, for a hole is chopped in the tree in order to pull the

animal out. When they have no axe they use a roughly chipped stone held in the hand.

The proper hunting of the larger vertebrates, mainly kangaroos and crocodiles, demands highly developed cunning and proficiency. For this hunting the spear is used, and the hunting is mainly done by the most experienced among the older men. The hunter smears himself with mud from head to heels, and sneaks slowly through the forest spying for kangaroos. As soon as he sights one, he assumes a twisted pose, trying to resemble a dry stump of the forest. While the kangaroo is stooping and grazing the hunter takes a few steps forward at a time, without altering the twisted position of his body. When the animal sits up and looks around he remains stock still. In this way, foot by foot, he stalks his quarry with infinite patience and endurance, and in the open forest the stalk is almost always a success. I personally have used this method successfully. In a similar way large crocodiles are also stalked and killed.

Sometimes a bit of jungle or forest is surrounded by beaters, and clever spearmen are posted in the 'butts,' killing the kangaroos, often in large numbers. But generally the kangaroo hunter works singly.

In their primitive way these people are industrious fishermen. Women, as well as men, use the fish-spear, which is mostly thrown or thrust directly with the hand. Crayfish and mussels are taken by hand. In the dry season, when the waters dwindle and the fish crowd together, they are caught by primitive dip nets. The best fishing is, however, during the floods or rather just after them, when the water drops in lagoons, side streams and inlets, and the fish desert them. Then fences are built over the narrow outlets, and in the openings of the fence baskets and fish traps are placed. The natives pitch their camp in the immediate vicinity and just empty the baskets, eating fish as long as the luxury lasts.

They are also acquainted with certain plants which have the power of poisoning or stunning fish, but personally I have not seen this method employed in Arnhem Land.

Even the insect world yields its share to their diet.



SPEAR THROWING, DALY RIVER.



SCREW PALMS (*PANDANUS*).

[Face p. 18.

Many large species of insect larvæ are roasted and eaten. The honey of the stingless Australian bees, which generally build in hollow trees, is one of their few luxuries, and in some places even the white ants are roasted and eaten.

After hunting, the men return to camp. The women have generally arrived earlier and are busy preparing the vegetables. All the game has now to be cooked, and this cooking is very simple in the case of all small game. Lizards, snakes, birds and small mammals are generally singed a little over the fire. Birds have to be plucked and the hair of smaller mammals is singed and brushed away. Then the belly is slit open with a sharp stone or a splinter of bone. The entrails are spread over the coals, roasted and eaten. The body is slit open, flattened as much as possible and half roasted on the coals, and then torn to pieces and distributed for individual treatment.

Larger animals and also the large yams are treated differently. A large hole is dug in the ground. A fire is made in this hole, and all the hair is singed off the animal, which is then dismembered. The fires are now raked out of the highly heated hole, which is then lined with soft bark, commonly the soft bark of the 'tea-tree' or 'paper-bark' (*Melaleuca leucadendron*). The meat is now placed on the bark. Hot stones or red-hot bits of ant-hills are placed between the meat. A little water is now sprinkled over. The meat is then covered with more bark, and hot sand or earth is heaped over the lot. In this way the meat is steamed sufficiently long, becoming very tender and keeping an excellent aroma, in fact being superior to meat fried in a pan or cooked in water.

The victuals are, with certain reservations, divided fairly. Only old men appear to get certain reserved delicacies. The lucky and the unfortunate, the enterprising and the lazy, appear to get the same treatment, the same share.

As a rule the Australian aborigine does not bother himself about more than the troubles of the day. Generally he is forced to live by this rule, for the day will hardly suffice for him and the women to get the necessary food, and day after day the conditions scarcely alter.

Broadly viewed, the Australian fauna is not rich.

And the native's abilities as a hunter are limited by the primitive character of his implements. Even where birds and other game abound their shyness denies him large bags. The rich fishing grounds only yield a scanty tribute to his spear and primitive nets and traps, when more perfect fishing gear, which he has not had the power of inventing, should have yielded an easy wealth. Broadly speaking, they exploit the fishing astonishingly little.

This constant dependence on the necessity of providing for the needs of the day, which have to be met, is probably, among other things, one of the factors which have kept the Australian native in his low and primitive level of culture. Nevertheless, one may perhaps be justified in asking the following question: Is not his primitive culture determined by his own primitive character? Has he not long ago developed as far as he can reach? Is it not his own nature, the qualities of his brain and body, which have stayed his development, and not the peculiar condition of his Australian surroundings?

But even if this were true, it was noticeable that such activities as were not absolutely necessary to the mere sustenance of life, seemed to thrive and develop when the struggle for a bare livelihood was less severe. When favourable grounds and lucky hunts and hauls made life easier and men less dependent on the morrow, their artistic sense seemed to awaken. They would manufacture weapons, or adorn these with idle and bizarre ornaments. They would sing at night—wild yelping songs of few notes and few words, expressing one simple idea; and to keep time with the songs hard wooden sticks would be beaten together, or a uniform drone would be produced by means of the bamboo horn. The women, sitting on the earth, would beat with cupped hands over the hollow between thighs and stomach, producing a deep drumming in time with the song and the rattle of the wooden sticks. Into the firelight would suddenly jump a young and slender girl, sometimes a mere child, sometimes a woman in the first bloom of youth, wild and graceful. She would dance the primitive and unconceivable dance of the savage, the meaning of which is beyond the understanding of cultivated man. The dancer scarcely moves from one spot,

while the lithe movements of the body follow the rhythm and meaning of the song. Small children may join in it, also young boys and men. Thus the night, especially if the moon were shining, might be spent in song and dance.

Moonless nights depress these people, a fact closely connected with their religious conceptions, if this term may indeed be used; for they have no gods, no cult. They are only deeply pervaded by superstition and superstitious ideas.

The most pronounced feature in their sphere of ideas in the enormous domain of superstition is their belief in evil powers, antagonistic to the life and interests of man, which is comprised in the pidgin-English word 'devil-devil,' but in the various parts of Arnhem Land is named variously '*barrang*,' '*bolongo*,' '*wurrang*.' The ideas about this 'devil' are vague and very variable, and he is sometimes pictured as an animal, sometimes as a man-like being. But, on the whole, the term *devil* in the mouth of these people merely means everything bad, everything hurtful to life, and the shapes given to the devil are groping attempts at personification, perhaps also an echo of memory, acquired by distant forefathers, of the extinct giant animals of ages long past. Who knows? At least, some investigators claim to have proofs that man was contemporaneous with the gigantic 'Marsupial elephant,' the *Diprotodon*.

Sometimes the 'devil' of the Australian native is said to be a gigantic crocodile, who makes certain river pools unsafe; sometimes he is conceived to be a tiger-like carnivorous monster lurking in the depths of the jungle; sometimes a dwarf-like man with large glowing eyes like an owl's. This last devil is supposed to prowl at night outside the circle of light produced by the camp fire, and his tracks are even visible sometimes to old and wise men.

The devil may take up its residence in a man and give him power to kill his foes by magic. At night he may go far away through the air until finally he stoops over his victim, sleeping at the camp fire, and "takes his fat," as the native expresses the process. The victim sickens,

becomes emaciated and dies. 'Matoma' is the name given to the disease.

Belief in the existence of this magic is so firmly rooted among these people that a natural death in fact always demands a revenge. If a man dies a natural death, the blame is put on the neighbouring tribe, and sooner or later a member of this tribe is killed in retaliation.

The Australian thus lives in continual fear of evil powers. In daytime he is comparatively free from care; but in the darkness of the night, when only the camp fire throws a small circle of light round him and his family, he sits fearful and with senses highly strung. A moaning in the forest becomes the sigh of evil spirits passing over, the fireflies become glowing eyes, every unusual sound of the night is transformed into the steps and whistling voices of devils, prowling round the camp.

The forest night is very often full of sounds, more or less accountable, and I have often heard these people, who are really experts at recognising most sounds, begin to discuss something they heard but could not explain. I have seen them excite one another more and more. They would turn questioning eyes on each other in growing consternation, like children afraid of the dark, and finally would spring up in wild panic, flinging their light reed spears into the darkness of the night.

Among other 'beliefs' or superstitions is the taboo-institution, common to almost all the peoples of the Pacific. The Australian aborigines recognise rules forbidding certain individuals to eat certain kinds of food or game. These restrictions apply to young men, and very often also to young women. Frequently we find that it is the more savoury types of food which are thus vetoed, being of course reserved for the men and the older people. Personally I got the impression that these prohibitions were instituted by those in power—for their own convenience.

Otherwise the taboo-conceptions comprise a countless number of acts which must not be done unless the culprit wishes unpleasant things to happen. Very often these taboo-conceptions resemble those we meet with among superstitious people in civilised nations, and which cer-

tainly date very far back, possibly to the days of prehistoric man.

Totemism is also common, and is very often a kind of individual totemism. In many tribes there is a prejudice against killing or injuring one particular species of animal or bird peculiar to the individual. The species might be, for instance, a duck, a heron, or some mammal. It is called 'brother' and considered as a sort of mascot. The native never kills it and does not like to see others kill it. It is very difficult to decide what really is at the bottom of these conceptions. I have always thought it probable that these totemistic ideas and also many of the taboo-conceptions have arisen and have been kept up with a view to protecting certain kinds of game, as a sort of automatic game laws. Certainly the older men among these people are not ashamed to support their authority by fraud and gross deception—gross at least according to our standards. I have witnessed striking instances of this.

I remember once seeing an old 'doctor' or medicine-man who pretended to cure a dog bitten by a snake. He did it by sucking, not at the bite, but all over the body of the dog. Every time he sucked he pretended to extract the 'evil'; he spat it out in his hollowed hand, went off some distance and buried it. I marked down all his places of burial and examined them later. The sucked-out 'evils' consisted of cow's teeth, bits of bone, pebbles, etc., which the old humbug had hidden in his mouth beforehand. It is quite impossible that he could have persuaded himself that he had really abstracted these objects from the body of the dog. Possibly he considered them as symbols. But the ideas of the savage run in grooves very different from those of civilised men; and every attempt on the part of a European at understanding the mentality of the Australian native must fail. When we analyse the tactics of leaders of thought down through the ages, we find much plain evidence that the men who have shaped the beliefs and dogmas of mankind have been to a large extent dependent on humbug and deception. We find this trait common to all creators of dogmas, from those of our own times to the Indian medicine man and the

Zulu *injanga*. All have cheated, all have maintained themselves and thrive on the fear and superstition of their people. Does it not then seem plausible that, even in the primitive society of the Australian savage, the clever and the designing may have found the manufacture of dogmas a paying business ?

When the grass begins to get dry in the autumn—March-May—the tribes of a certain district begin to march for the usual meeting-place. As they march, the grass is burnt, and the red glow of the night sky signifies to the forest dweller the approach of his neighbours. Night after night he sees the fire-glow in the sky increase in strength, until the tribes finally meet in a time-honoured spot. The great corroboree, the annual international or inter-tribal meeting now begins. The tribes, whose languages, as previously mentioned, are often very different, now negotiate by means of interpreters. All disputes, all accounts are discussed and settled, very often by bloodshed ; young boys at the age of puberty are circumcised, and arms and other articles are bartered. Soon, however, they indulge in a peaceful enjoyment of dance and music. Tribe after tribe appears, as it were on the stage, to display its merits, and the noise of the concert and the dance may be heard for miles.

This is a blissful time for the savage, and his enthusiasm and energy know no bounds. In order to abandon themselves to the pleasures of the corroboree these people willingly suffer the comparative starvation which such a meeting necessitates. Several hundred people cannot in these parts live for days in a limited area and still find enough food. But the savage starves with equanimity. He loves dance and music, and exerts himself to the utmost in order to please the young women who sit round the fires.

At these meetings, too, the women are exchanged. They are given as fines in the settling of disputes, are given away as tokens of friendship, and as children are very often promised in marriage. Alliances are, however, also contracted independently between the young people themselves, and abductions yield plenty of material for next year's disputes.

The Australian is averse from in-breeding among humans, and marriage between men and women belonging to the same tribe is out of the question. A man always chooses his woman from a strange tribe, new blood being thus constantly introduced.

As a rule they are monogamous from necessity ; but whenever opportunity offers the man keeps as many wives as he can. The relations between man and wife vary, as in other races, and marriages in which great and mutual devotion is obvious are rare.

Childbirth is easy and probably almost painless, while new-born children are accorded a treatment which would probably kill off white babies at once. They are simply placed on a piece of bark and carried along on the march.

The education of children is very simple. I never saw the children chastised. They tyrannised over their parents. Language and all bodily proficiencies appear to come to them spontaneously. The ability to swim, for instance, seems to be inborn, for I never saw children being instructed in swimming. Nor did I ever see a child which could not swim as soon as it was out of its mother's arms.

The number of children is as a rule small, mainly on account of the preventive measures which undoubtedly are taken. The simplest method is infanticide, but it is beyond question that they know and practise fœticide. Very often also the reproductiveness of the male is checked by barbaric operations ; for instance, a partial or total splitting of the urethra. Late marriages also in certain cases retard propagation. In these tribes—this applies especially to my experience of Dampier Land—where the men do not marry before they are at least thirty years old, very bad morals were to be observed, at least according to our standards.

These are in short the main features of the life and peculiarities of the aborigines of Northern Australia. Other details from their life will appear in the following chapters treating of our adventures among them.

CHAPTER III

UNIYA.

After some excursions in the neighbourhood of Port Darwin, our preparations were completed and we were able to start for the Daly.

On the 3rd of July we took train to Fountainhead, where we found our horses and the black horse-boy Tommy.

At Fountainhead lived a storekeeper who also acted as stationmaster and postmaster. The virgin forest stretched away from his back-yard, and many miles separated him from the nearest mine or the nearest white man. We got quarters for the night at his house and held modest revels with a couple of passing stockmen who were sampling the storekeeper's whiskey.

On the morning of the 4th of July we saddled and rode towards the Daly. A track wound north-west past some mines, and with Tommy as guide we followed it. Through a desolate, desert-like region covered with a stunted and scanty scrub, we passed the Brooks Creek gold mine, and towards the middle of the day reached the Howley gold mine. Here we camped, boiled a quart pot for tea and had a short midday rest. Then we rode on again. The track now dwindled to a faint trail, and the roar of the mines' machinery, the last sound of European activity which for months would reach our ears, died behind us in the forest. The trail led us to an old deserted tin mine at Mt. Shoebridge, a considerable range of heavy obtuse mountain cones. Then the trail almost disappeared. Only now and again depressions in the soil indicated that many years ago, in the promising days, waggons had gone out to the Daly, but now the missionaries were the only white beings who at long intervals travelled the faint trail.

We plodded on through the mountains mile after mile,

following a river course surrounded by heavy bamboo jungles in a narrow valley, then passing another chain of mountains, and running up against an old dilapidated wire fence. This was the remains of the paddock fence of a large cattle station, long since deserted.

The evening was approaching, the sun hung low over the western hills, and long shadows from the trees fell across a lonely mountain valley, where the melancholy note of the butcher bird appeared to be the only sound. We camped at a small creek, hobbled the horses, put up our mosquito nets, and made the usual preparations for the evening meal. In the meantime I took a walk with my gun. From a thicket of screw-palms surrounding the creek, a pair of large, long-tailed birds were flushed. They were the swamp-pheasant of the colonist, really a large species of cuckoo (*Centropus phasianus*). The bird is about the size of a common magpie, but its tail is nearly twice as long as that bird's. During the rainy season the male discards the brownish-grey plumage for an almost coal-black coat, which extends to all parts of the body, excepting wings and tail. This stately bird is to be seen everywhere in the vicinity of water, where it lives in the grass, generally alighting on the first tree, when flushed. In the dry season it is mute, and only towards the rainy season emits a deep, strong and very peculiar call. It sounds as if a drum were beaten quite lightly and with increasing rapidity.

Night fell. No wind stirred the leaves of the still forest, and the smoke rose like a pencil from our camp fire, where Tommy was preparing our simple evening meal. Whether from suspiciousness or from fear of his new masters our horse-boy had not a great deal to say. He devoured his victuals in silence, with animal greed, and whenever I looked at his low physiognomy, his flat nose, the gigantic protruding mouth and the low forehead, I felt a kind of unspeakable disgust, mingled with a certain uneasiness, a feeling of insecurity, which at the outset quite naturally assails the lonely traveller among savages.

During the night the mosquitoes became troublesome, and very soon we resorted to our nets. Tired as we were, we dropped at last into an uneasy sleep. A vague uncertainty

about our horse-boy and an anxiety as to the whereabouts of the horses kept us more or less wakeful, listening to the sounds of the forest night and to the tinkle of the horse bells, which sounded feeble and lonely in the vastness of the surrounding wilderness.

Next morning we made a hurried breakfast and rode on. We very soon reached a flat open forest land, in which the endless uniformity of the landscape was only broken by an occasional watercourse, almost dry, and surrounded by thick bamboo (*Bambusa arnhemica*) and specimens of the gigantic Leichardts tree.

On the previous day, when we were passing the mines, Tommy frequently spoke with relatives and friends of his own tribe and told them where we were going. I did not doubt for a moment that some of them even now were on their way towards the Daly. But Tommy's previous record, as reported to me, was by no means of a nature which in my present inexperienced state invited a closer acquaintance with his associates. In his youth he had been implicated in a very ugly case of murder, which had occurred on the Daly about ten years ago, and to which I will revert later on. Father McKillop told me that he too had once narrowly escaped an ambush from the same Mr. Tommy. Altogether our guide's past was by no means reassuring, and although I felt no fear I nevertheless kept a very wakeful eye on Mr. Tommy and our surroundings.

Once in the forenoon Holm lagged behind to look for some cockatoos, visible between the trees a little way off the trail. Tommy rode in front and I followed, driving the pack horses. As we approached a deep watercourse, surrounded by bamboos and tall grasses, about 100 yards from the bed of the creek, I suddenly saw a large dark form cross the trail just in front of Tommy's horse, and disappear in the tall grass. Owing to the distance I could not decide whether it was a kangaroo or a man. We crossed the deep creek, and on the other bank Tommy stopped. I then asked him if he had seen the kangaroo crossing the trail. He denied this, and as there could not be the slightest doubt that he must have seen it, my suspicions were aroused. They increased considerably

when, on the pretext of looking for an old fish-hook previously lost in a stump, he asked permission to ride some way down the creek. I thought it more prudent to wait for Holm's arrival and then let our guide go off, moreover the pack horses could get some grazing in the meantime.

Positive by this time that blacks were watching us not a gunshot off, I drew my revolver and rode on to the bank, where I could get a good view. From this point of vantage I could prevent Holm's falling into an ambush and at the same time could keep my eye on the surrounding country.

I shall never forget my feelings as I saw Holm come riding quietly along the trail and observed at that moment a movement in the patch of tall grass, where previously the suspicious form had disappeared. How eagerly I cocked the hammer, how firmly I gripped the handle of the pistol to secure a steady pull of the trigger, and how sharply I watched that patch of grass! I was so certain that a savage was on the point of rising in the grass and flinging his light jagged spear at my companion, that I was almost on the point of firing at the image my highly strung senses visualised.

Holm, however, rode on, and as he passed, the grass was violently stirred towards the bed of the creek. But nothing was visible, only the wave in the tall grass which indicated that a human body was moving through it. During the whole passage and for some time after I had an uncomfortable feeling of being closely watched by someone of whose intentions I was entirely ignorant. The peculiar discomfort of this feeling can only, I think, be fully appreciated by people who have been in similar circumstances.

Shortly afterwards Tommy returned, but neither his features nor demeanour gave the least indication that he was deceiving us, and until this day I have been unable to decide if we really were the object of a planned attack. I am inclined to believe that it was so, for, according to my later experience, it is highly unusual for the blacks in this region to act in the manner described above. They would undoubtedly, if their object had only been of a friendly nature, not have hidden themselves. Long after,

however, when Tommy was out of my service, he admitted to me that he had been fully aware of the presence of his fellow-tribesmen and had really ridden away to meet them, but in this he insisted that he had been unsuccessful.

That the natives desisted from their intention of ambushing our small party is by no means surprising. They will invariably abstain from an attack as soon as they find the intended victim on the alert. They may even hide their arms and make their appearance friendly and innocent, if they are certain they can do so with impunity. One is never quite safe among these people, and the newcomer, who is unfamiliar with them and the various feelings and passions which rule them, feels a continual uneasiness, which sharpens his senses and makes him sleep lightly. Later on, when he gets to know the tribes, and they know him, he takes everything coolly. He trusts his senses, but it never occurs to him to confide fully in any of these sons of the forest or to trust their integrity, however much he may be tempted so to do. He gets the best hold on them by making due allowance for their egotism.

After a short midday rest at the ruins of the old cattle station, we continued our monotonous ride. How melancholy and desolated this enormous forest appeared to us! No wind stirred the stiff foliage, no bird sang in the trees; the stillness of death seemed to reign supreme over a land teeming with vegetation and void of animal life. Not altogether, however.

Here and there at long intervals we rode through areas where the forest trees were in bloom. *Grevillias* and various *Eucalypti* exhibited a wealth of shining yellow flowers on which were feasting flocks of shrieking parrots and honey suckers (*Meliphagidae*), both belonging to bird families which in many species inhabit the Australian forests. These honey suckers have plain plumage, and in their size and form bear some resemblance to the thrush. Their beak is curved, and the point of the tongue is tipped with fine horny bristles which form a brush suitable for the absorption of the honey from flowers.

Among the blossoming trees the so-called 'woolly butt' (*Eucalyptus miniata*) seemed to attract the most birds. I paid all the more attention to this, as I recalled

having seen this species in bloom a month before near Port Darwin, and consequently was a little surprised at finding it still blossoming. But later experience taught me that the blossoming of trees in this country is very independent of the various seasons. Over a large area in different parts the same species may be found blossoming in various seasons, and even in localities not very far from one another the same kinds of trees blossom at different times of the year. On the whole I think it will be agreed that in this region reproduction among plants as well as among animals is far less dependent on the seasons than in temperate climates.

As soon as we had passed these patches of blossom almost all the bird life seemed to disappear; but riding along over the burnt forest soil we would suddenly come upon some birds, rather smaller than partridges, quietly wandering along, only a few steps from the horses' feet. Their build was short and stocky, and their slaty-brown protective colouring gave them such confidence that they did not rise until the horse was almost stepping on them. They were a species of pigeon, by the colonist generally termed 'partridge bronzewing' or 'squatter pigeon,' and their scientific name (*Geophaps Smithii*) is also derived from their preference for the ground. More than any other pigeon I have met with, this species keeps to the earth, and if unmolested walks through the grass without flying up into a tree before nightfall.

We had a dull afternoon's ride, and it was dark before we found water. Tommy, however, proved a good guide, and took us to a paper bark swamp, where we camped. Here the mosquitoes almost devoured us, and small rats and bandicoots disturbed our sleep all night. At day-break we were off again. In the forenoon we rode on through the mountains. At midday we arrived at a little stagnant lagoon where a small black and white cormorant was diving among the water-lilies. I shot it and Tommy served it up for dinner. The lagoon was, as I heard later, called the Noltenius Billibong,* and a tragedy was the origin of the name.

* Billibong: originally a native word, now commonly used in Australia to signify a small permanent tarn or lagoon.

About twelve years ago copper had been found on the Daly and a syndicate had been formed. Some men began the first rudimentary diggings at the place where the Daly Copper Mine was situated at the date of my visit. There were five men, Harry Houshield, Jack Landers, also termed 'Hellfire Jack,' Noltenius, a Dane called Oxoll, and also a man by the name of Jack Roberts.

These five men lived there for some time, built a small house, worked the mine, and came gradually into contact with the natives, who finally for a small payment in tobacco and flour were employed in the mine. All went well at first. Whether it was over women the catastrophe occurred or simply from the natives' hatred of the white man or their greed for provisions, I am unable to tell. Pretending to have found gold, some of the blacks decoyed Harry Houshield into the mountains. In the evening when he lay under his mosquito net the blacks sneaked up and half stunned him with a stick. Drawing his revolver he tried to get out of the net to fire, but his horse-boy Nammy, who had been with him for many years, drove a stone spear through his chest, killing him.

In the meantime the others were working as usual in the mine, each in his own prospecting shaft. Suddenly the blacks rose to a man and speared their masters. As the white men did not drop at once, the blacks fled. Hellfire Jack did not go far before he succumbed. Oxoll and Noltenius took refuge in the house, the one with a couple of spears through his stomach, the other with a spear through the lung. Jack Roberts had been digging in a hole when the black who was helping him struck him with a pick, hitting him a slanting blow on the side of the head. Jack fell and the black man ran away.

The day wore on. The blacks hid in the forest, not daring to approach before their victims were dead. Night fell; Oxoll died, and Noltenius sat alone, the blood oozing from his spear wound. At last he stole out and began to crawl the 40 miles separating him from the old Daly cattle station which we had passed on our way out. At nightfall also Jack Roberts came to his senses again. Looking cautiously round for his fellows, he found the dead

bodies, and weak and staggering started on the same trail as Noltenius, ignorant of course as to the latter's fate. Trudging on the next day he met some of the blacks who had murdered Houshield, and who were riding his horses to reach the copper mine and to share in the plunder. Not knowing what had befallen Houshield, Roberts only took the horses he required, and so reached the cattle station. On the following day the manager of this station (Mr. Saxe) rode out to the mine, after sending a message to some people living on the telegraph line. At the lagoon, later named after him, they found Noltenius dying, more than seven miles from the mine.

The sequel, which in the Australian bush has always followed such murders, occurred in due course. A police force spent some time on the Daly, and was said to have bribed natives to assist in arresting some of their brethren who were supposed to have had a hand in the murders, and justice was meted out as well as circumstances would permit. Tommy was arrested among others, but was finally let off. Another gathering of white men, friends and fellows of the victims, also embarked upon a campaign of vengeance against the Wolwanga tribe, which had been responsible for the deed. The reports on this campaign vary, but participants have told me that after a long search they finally found a great portion of the tribe gathered at the abandoned mine. They surrounded them, drove them into a lagoon, and shot them all, men, women and children. The truth of this report was commonly endorsed and believed; at all events, it is true that the Wolwanga tribe, which was once the most powerful tribe on the Daly, became very weak after the events following the murder.

We continued our journey through broken mountain country, the western slope of the Heyward Ranges. After some time we met one of the lay brothers of the mission, who, with a couple of black boys, was on his way to Fountainhead to meet Father McKillop. After a short talk we parted and rode on. We soon reached the copper mine, where a few Chinamen worked.

This mine is situated on the edge of the forest plains stretching westwards from the foot of Mount Heyward.

A still and black lagoon winds along among trees and rushes close to the house, and a track, fairly well beaten from the carting of copper ore along it, leads towards the Daly River. As we followed this track through the open forest of the plains it was obvious to us that we were approaching a large river. The sun hung low on the western horizon, and all around river kangaroos were to be seen grazing with bent backs. Flocks of ducks and other water-fowl were passing over, and now and again dark masses of jungle, indicating the bends of the Daly, were visible to the left of us. Crowds of natives appeared here and there, naked men and women, jabbering in their own hoarse tongue, and before long a numerous following of wild-looking savages were swarming round us. As soon, however, as they had ascertained our destination they quieted down, and only a few enthusiasts followed us on.

A fenced enclosure where a Chinaman cultivated a small garden for his countrymen on the mine was passed, and before long we sighted plantations and a large sheet-iron building, which appeared as a large bluish blurr in the dusky twilight of the forest. One of the missionaries, surrounded by naked and half-naked children, met us at a gate leading to the mission enclosure, bade us welcome and took us to the house, where we unsaddled and were well received, being shown into a spare room of ascetic furnishing.

A multitude of natives, all armed with spears and woomera, curious about the new arrivals, had now gathered in front of the house. One thing, however, was in evidence. A solid wire fence prevented them from approaching closer than about twenty yards from the house. Only specially favoured natives were admitted, and the whole arrangement was evidently a precaution which told a tale of the precarious life of the missionaries. Tommy, who was admonished as to the safe guarding of our horses, entreated us for the loan of a revolver in order to have some means of defence, when on the following morning he had to fetch the horses. In this strange district, belonging to another tribe than his own, he was evidently not sure of his life. At any rate, he looked very frightened and got the revolver.

For many nights this loan was repeated until finally he felt safe.

After a good wash, a great comfort after our dirty three days' ride, we sat down at a long table on the northern verandah, where all the white members of the mission, twelve in number, were seated, and where a frugal evening meal had been prepared. After the meal we sat on the verandah smoking and talking with our hosts, who were nearly all of German or Austrian origin. At bedtime one of the fathers, a small kindly Irishman, followed us to our room. I got a bit of a surprise when the reverend father frivolously asked me if I would not like a 'nightcap.' Being sufficiently versed in the *argot* of the bush to understand his meaning, we followed him into the store-room, where in due concord we had a stiff nip of gin. The arrangement of the station, the genial glow of the gin and the hospitality of our hosts pleased my companion Holm very much, and his last observations that night were highly complimentary to the Jesuits and their mission.

This mission station was indeed nothing less than a Jesuit community in the wilderness, a branch of the Society of Jesus, which even in this far-off place carried on its propaganda with the energy peculiar to it. About twelve years ago these missionaries had arrived in Arnhem Land, and first of all had settled at Rapid Creek near Port Darwin. But the distracting influence of the township forced them to give the place up. They then moved to the Daly and built a station at the old native camp of Uniya, a little way above the Daly copper mine on the western shore of the river. This station also was shortly given up, and they moved to Hermit Hill, where they erected a station on the edge of the so-called Serpentine Lagoon in order to reach virgin regions and entirely unspoilt natives. In this place, too, all their work was in vain. The soil was unsuitable, and with the same undaunted energy which had carried them through their previous disappointments they migrated to their present home on the banks of the Daly and named the station Uniya after their first station higher up the river.

Considering that more than sixty miles separated them from inhabited places, their achievements were by no means despicable.

Besides building a house with separate cells for all the fathers and lay brothers, and also a small chapel, they had broken up about thirty acres of soil, had built a blacksmith's shop and a carpenter's shop and several outhouses, besides a large lighter on the river. They had also reared a considerable herd of cattle and horses and more than 1,500 goats, which yielded all the meat they wanted, and which were steadily increasing beyond the demand. In a small printing office they had printed several hymns, an alphabet, and a few Biblical tales in the native language. Every father and brother of the mission had his definite function, his allotted part in the whole work, and everything was organised with that singleness of purpose and splendid method in the distribution of work, which have always been peculiar to the Society of Jesus.

As we shall see, this organisation is on the whole admirable, and should to a certain degree justify expectations of favourable results, especially when the methods of the mission are taken into account. Here, as well as in other places, the Jesuit mission does not in the first instance aim at instilling religious conceptions into the savage, 'converting' him. The Jesuit has too much science not to understand that people who have lived in a state of perfect savagery, without a trace of real religious conceptions, and whose fathers from times immemorial have lived in the same way, never can conceive, never can absorb the religious creed characteristic of European civilisation. They cannot suddenly skip the evolution of thousands of years.

Let us, the Jesuit argues, first of all persuade these savages to give up their roving life, let us teach them to cultivate the soil, and let us make them understand that their work in this way brings them greater happiness, makes them more care-free than their old life. Then possibly their progeny, the new tribes of settled agriculturists, may be more susceptible to our religious propaganda.

This method has been employed by the Society among many savage peoples, as for instance in North and South America, where they have been instrumental in turning nomadic Indian tribes into settled farmers.

In Australia, however, the problem was rather different. The missionaries had, by the aid of the natives, brought under cultivation a considerable patch of land, a small part of which was parcelled out among various natives, who were supposed to be able to exist on the bananas or sweet potatoes yielded by the soil. There were certainly no difficulties about obtaining workers, who for a small payment in tobacco and flour did the work on their own allotments. But as soon as they had to subsist on the yield of the soil or when they had been for some time in steady work, a passion for their old free forest life drove them into the wilderness. Off and on they would return, really, I think, to get tobacco, the only trading article of the white man that, once known, presents an irresistible attraction to the Australian savage.

It seems to me very doubtful if these children of the forest can ever be persuaded to desist from their inherited roving habits of life. The attempt has been made so often, and has always failed. They have been educated from babyhood. They have studied, even at universities, with success. But they have, as far as I know, all reverted to the bush as soon as they again set foot on Australian soil, as soon as the breeze carried the scent of the primeval forest to their broad noses. A peculiar, almost inexplicable, passion drives them back to the forest and their freedom. Yet, is this passion so strange? In my opinion the missionaries were wrong in their belief that a settled agricultural life would make these people happier or more care-free, or offer them greater material advantages, than their old life. To the forest savage, having inherited his nature from thousands of savage generations, the forest is best. The forest gives him as good a livelihood as he needs; it gives him unbounded liberty; it gives him the little joys and pleasures that fill his life. Nor will the progeny of these people, at all events in the immediate future, lose the character of their race or be able to skip evolution. Even if they could, they would not get the time, for the mission would not be able to keep them isolated. The brutal forces of colonisation, which are bound in due course to reach these regions, will play their unavoidable part and contribute towards the degeneration of the abori-

gines. Here as everywhere else the probability is that they will become extinct, and that when a busy population covers the plains where once the forests of the Daly stood, the roving savage will no more exist. Now and again the ploughman will find his bones, melancholy evidence of a race that has perished.

Nor can I doubt that the missionaries themselves are conscious of the hopelessness of their task. One evening I was discussing the various aspects of the mission with one of the fathers, and expressed the opinions which I have sketched above. "Well, well," he remarked sadly, "perhaps you are right. We have worked here for twelve years, and this is the result." And he swept his hand towards the surrounding forest, where the savages danced howling round their camp fires.

We lost no time in making the necessary preparations for starting our collecting work. To my great satisfaction the fathers agreed to let me pay for my board and lodging, whenever we stayed at the station. We could thus avoid all the trouble of catering for ourselves and save much valuable time. The fathers kindly allowed our store of provisions, ammunition, tobacco, etc., to remain in the storeroom of the station. We were permitted to use a small shed, where McKillop had had his quarters in the early days, as a workshop for the preparation of specimens. This we dubbed "the museum," installing our instruments and preservatives there and rigging up a number of shelves and platforms where our stuffed specimens could dry. These shelves always had to be suspended from the roof, with water-cups to prevent the ants from crawling down and eating our specimens. Otherwise they would have devoured everything. Thus equipped, our collecting work could seriously begin.

About the station, and occupying a territory the limits of which I could never exactly define, lived the Mollak-Mollak tribe, the largest of the Valli-Valli tribes. Valli-Valli is the native name for the Daly, and along its lower reaches live three tribes which are very closely connected, possibly forming a joint tribe and speaking practically the same language. The Mollak-Mollak live, as I have said, in the neighbourhood of the station. Further down, on



SCHOOLGIRLS, UNIYA MISSION STATION.



BOYS, UNIYA MISSION STATION.

the northern bank, are the Pongo-Pongo, and on the southern shore are the Tjerait. Further out, on the coast, are the Wogait, a tribe entirely different from the Valli-Valli people, possessing an extensive territory. From all these tribes, and also from several others which will be mentioned later, representatives were gathered round the mission station, which appeared to be a kind of neutral ground. Some were working on the plantation of the mission, but the majority frequented the neighbourhood of the station only in order to sponge upon their relatives and get some share of the small quantity of tobacco earned by these. These tobacco-hunting loafers were just the right people for my purpose. For a small payment in tobacco they would bring me all the ordinary animals which were to be found in the neighbourhood. No sooner had I made my trading intentions public than daily we were besieged at the door of our 'museum' by people who wanted to barter away for tobacco everything, from their day's bag of animals to their arms and ornaments. For tobacco they would sell or do anything, and I am perfectly confident that among these people I could easily have found individuals who, for a stick of tobacco, would not have hesitated to kill their own grandmothers.

Insects, snakes, lizards, frogs and fishes were received by me just as willingly as specimens of the higher animals, and among these collections we found several new and unknown species. Thus in the *Proceedings of the Zoological Society of London*, 1895, Mr. G. A. Boulenger, F.R.S., of the British Museum, has described a new blind snake (*Typhlops nigricauda*) and a new frog (*Chiroleptes Dahlii*) from these collections.

Only a few mammals were brought me by the natives. As a rule they brought in the common bandicoot (*Perameles macroura*), generally termed 'koppol.' A large male of this species is almost of the size and shape of a new-born pig. The female is considerably smaller. As in most marsupials, which are not tree-climbing or walking upright, the opening of the pouch turns towards the tail. Everywhere in Arnhem Land the species is plentiful, especially in the neighbourhood of large rivers and watercourses. They live in little grass-lined hollows in the

earth, and at sundown come out to feed all night on seeds, herbs and insects.

Now and again the blacks brought me another marsupial called 'vie,' being the common opossum (*Trichosurus vulpecula*) or tree phalanger. The family of the opossums or *phalangistás* occurs in numerous species, of which some are very local and of very limited distribution; but the common opossum is found all over the continent. It spends the day in hollow trees and at night feeds on the ground or in the trees, among which it moves slowly, aided by its powerful prehensile tail. The hair-covering is thick, forming excellent fur, and in the southern parts of the continent the animal attains the size of a cat. In the north it is much smaller; two varieties were noticed, a brown variety peculiar to the jungles and a blue-grey one peculiar to the open eucalyptus forest. But intermediate forms were also to be observed. In the north it breeds all the year round, not more than one baby opossum being found at any time in the pouch of the female. At birth it is only the size of a bean, and it remains in the pouch until it has attained almost the size of the European squirrel, possessing a thick furry coat like that of the mother. The fur coat of the young opossum has, however, a strong grass-green tinge which after a couple of weeks gradually fades and is replaced by the colour peculiar to the full-grown specimen.

For some time we were fully occupied in preserving the specimens brought in, and had very little occasion to go out ourselves and collect. All day the blacks poured in with specimens, and Holm and myself had our hands full, paying out tobacco and doing the preserving and skinning. 'Pine Creek,' an enormous native of the Mollak-Mollak tribe—this curious name was given him by the missionaries because of a visit once paid by him to the township of Pine Creek—acted as our principal assistant, and sitting in the shade outside the door killed the animals brought in. He was a specialist in killing large lizards and iguanas, and despatched them by simply sticking their heads into his enormous mouth and severing their neckbone with a bite and a tug.

Pine Creek persisted in telling me of a 'billibong'

not far from the station, which abounded with a species of crocodile named 'aridallala.' That meant in his language 'long mouth.' The species was said to be quite small, to possess a very long snout, and to spend the day asleep on logs sticking out of the water. According to Pine Creek they were quite harmless. One fine day I followed him out to look for them. He took me through the plains and along the river to a place where in flood time a very deep inlet had been cut, which was connected with a chain of lagoons, whose water obviously was derived from the Daly. The river is peculiar, in that its banks in some places are a little higher than the surrounding country. During the floods of the rainy season the river rises above the banks and inundates large areas. These inundations have attained such dimensions that the missionaries, according to their statement, have gone in boats upwards of forty miles over flooded land. The rainy season over, the flood water gradually passes through various channels back into the river.

The inlet in question is part of such a channel which in the dry season is isolated, forming a stagnant lake between steep banks. A profuse growth of casuarina trees, tea-trees (*Melaleuca*) and Leichardts trees rise from the dense reeds which almost encircle the water.

From the bank of the lake, which we approached crawling and with great caution, we carefully scrutinised the water. The native insisted that a crocodile was lying on a log under the opposite shore. As I could not make this out, we crawled a little further, and immediately discovered a second, sunning itself on a thick branch which rose obliquely from the surface. At the impact of the bullet it tumbled into the water, disappearing with a splash.

Immediately afterwards another head appeared on the surface to the left, dived and appeared again about thirty yards off, right below me. A bullet through the spine made it turn its belly up, dead as a herring. Then it sank quite slowly, the blood colouring the greyish green water of the lake.

Quick as lightning Pine Creek sprang down the bank, broke through the reeds and swam for the crocodile. Dive as he might, however, he was unable to retrieve it. He

returned with vigorous strokes to the shore, and came laughing out of the reeds, his wet black body shining in the sun. In a moment he was at my side on the steep bank, assuring me that the crocodile would rise to-morrow, when we would surely get it.

A little way off some natives were beckoning us from a clump of trees on the bank. On reaching them I was shown the head of a crocodile appearing on the surface. Exhorting Pine Creek to hurry, I fired. The crocodile turned its white belly up, and quick as thought the black men tore into the water. Pine Creek arrived first, just as the crocodile was sinking, grabbed it by the throat and pulled it ashore. Amid the hoarse applause of his fellows, the tall, strong savage carried the quarry up the bank, and after another couple of shots under very unfavourable circumstances we turned homewards.

After a little time, however, Pine Creek found the weight of the crocodile somewhat tiring, and deciding to have a short rest, dropped his burden. No sooner did the crocodile reach the ground than it began to move, and at a ridiculous canter made off with surprising speed. Luckily I found a dead branch, and a clout over the head stopped it effectually.

Further on we startled a snake, which darted away like an arrow. But we caught it and killed it.

As a reward for our successful hunt I dealt out a little tobacco; and, squatting in the scanty shade of a gum-tree, the white man and the black sons of the forest gave themselves up to the harmonious enjoyment of nicotine. Under the fierce sun the dark faces grinned blissfully through the blue clouds of the smoke.

As we sat, the monsoon whispered through the long grass, swept away the smoke and rattled the stiff, thorny leaves of the screw-palms. Along the river we could hear the swish and drone of the hollow bamboo and the casuarina trees, as they bent sobbing to the pressure of the wind.

The crocodile in question belonged to a small long-nosed species (*Crocodylus Johnstoni*) occurring in the inland waters of Northern Australia. It rarely attains any considerable length, $2\frac{1}{2}$ to three yards at most. In the shape

of the snout it recalls the Indian Gavial, found only in fresh water. Its small size and comparatively innocent teeth limit its depredations to small vertebrates only, and to man it is entirely harmless. The natives often catch them by diving and grasping them with their bare hands. In the lake of Dingeriet they swarmed, and we could always take a walk over there and shoot the specimens we wanted. Dead crocodiles, which sank in too deep water for the natives to reach them by diving, were always lost to us. They rose when they were half putrid, and the blacks invariably ate them.

As previously mentioned, we did very little shooting during the early days of our stay at the station. Now and again I took my gun out in the evening and shot a few birds, and also saw great numbers of river kangaroos. Close to the station they were very wild and difficult to shoot with a shot gun. But we found a remedy. On the first Sunday we collected an enormous mob of natives, and in the company of some of the lay brothers, who considered Sunday shooting as a pleasant recreation from the week's toil, we went to beat one of the adjoining river jungles. This consisted mainly of bamboo. Here and there rose Leichardts trees or solitary gigantic cotton-trees (*Bombax malabaltaricum*) surrounded by dense scrub. Drovers of kangaroos had their resort in the bush, and large, well trampled kangaroo paths led in all directions.

The blacks were now arranged in a line at one end of the covert, while we went to post ourselves further on. As we entered the bush a kangaroo jumped up and made off in long jumps. I fired, but the animal ran on. Holm then fired, and it rolled over and over like a hoop, finally dashing its long tail on the ground, stone dead. We hoisted the body into the fork of a tree, manned the line of posts and signalled the beaters.

A concert of varied yells answered us from the blacks. Emitting a monotonous "Wo, wo," the chain of beaters now advanced, flogging the hollow bamboos with sticks and producing a noise unequalled in my experience. Now and again, when a fleeing animal attempted to break back, a tremendous babel of yells and beatings arose. In our immediate vicinity a perfect stillness reigned. Then sud-

denly, as the chain of yelling beaters approached, we heard the trampling of kangaroos stampeding at random, white cockatoos came shrieking over us, and flocks of startled pigeons flashed overhead.

All at once a kangaroo passed me so rapidly that I failed to get a shot at it. I listened intently and heard an animal going in the direction of Holm. A report followed, and some kangaroos came towards me in panic. One stopped for a moment and immediately fell to my shot. Several passed me while I was re-loading. More and more came as the beaters advanced. At last the whole jungle seemed alive with animals, and every few minutes I could catch sight of half visible kangaroos moving with tremendous rapidity.

Finally the yells subsided and the beaters came up to the line of guns.

We had bagged a couple of kangaroos, which we sent home. The beaters were then extended once more, and we took up new positions. I chose a suitable clearing, and the beating began again. I could hear my companions shooting around me, but could get in no shot myself, although numerous kangaroos passed me in the dense jungle. They were often quite near, but, owing to the denseness of the jungle, were invisible. The beaters were close up to me again when I heard them give a medley of warning yells. Then came the trampling of a kangaroo heading straight towards me. I cocked my gun and as the animal bounded across the little clearing my shot made the fur fly from its coat. The range was under ten yards, and it fell stone dead. At that very moment a huge black burst out of the thicket, and, grabbing the kangaroo by the tail, whirled the heavy animal round his head, finally dashing out its brains against a log on the ground. To crush the head of animals is a mania with these barbarians, and very often I had great trouble in rescuing the skulls of my specimens.

The kangaroos had now grown wilder and more difficult to beat, so we walked home in open order. When we were almost at the edge of the bush I sighted a young kangaroo running off at great speed. It fell at my shot, stone dead as I thought. Lifting it by the tail, I carried it

along, but had not gone far when I felt something tugging at the leg of my trousers. The kangaroo was still alive, clinging desperately to my pants with teeth and claws, and only desisting when given a finishing clip over the neck. Fortunately the skin of my leg was unscratched, which was lucky, because the teeth of the kangaroo are as sharp as the beak of an eagle, and in its death throes the kangaroo bites severely.

Very soon we all foregathered and discussed our successes and disappointments. The bag was six kangaroos, the result of our two hours' drive in difficult country, and this was considered good enough. The blacks were well pleased, and on arriving at the station feasted on the meat. Care was taken to preserve the skins and skulls, and on the promise of a reward in tobacco a native undertook to clean the skulls for me. On the following morning, or perhaps a little later, the native came to me again—without the skulls. It transpired that he had roasted and eaten them, bones and all. Notwithstanding this, he had come for the promised tobacco.

The kangaroo we had hunted was the jungle or river kangaroo (*Macropus agilis*), the commonest kangaroo species of the north, being about the size of a sheep, and having a greenish-grey fur, fading to a dirty white under the belly. A lighter band very often crosses the loin. Along all rivers this species occurs in countless numbers. The hot day is spent resting in the shade of the jungles, where the animals, often in little herds, lie lazily on their sides, sunning themselves in shallow burrows dug in the hot sand. Towards sundown, when the heat of the day is moderating, they begin to scatter, seeking food. Every night the river kangaroo approaches the river to drink, but the hour of its visit varies, and in some strange way is influenced by the moon. When the full moon rises soon after sundown and brilliantly illuminates the landscape practically the whole night through, the animals seek the water whenever thirst prompts them. On dark nights, on the other hand, sundown is the signal for all kangaroos to seek water. They must have light. In the dark no kangaroo dares to approach the river, and for very sound reasons. At the drinking places the great

Indian crocodile (*Crocodylus porosus*), the born enemy of the species, is wont to lie in wait, and its strong jaws close over many a rash young kangaroo. Countless numbers have through the ages fallen a prey to the crocodile, and the species has learnt to take very cunning precautions. If circumstances permit it, the kangaroos prefer long flat sandbanks as their drinking places. Here they have a free view, and, what is more, they need not go to the edge of the sandbank to quench their thirst. Several yards away from the water's edge they dig a hole in the water-logged sand, wait for it to fill, and drink in safety. In localities devoid of crocodiles this device, being unnecessary, is not practised, but the habit is an excellent example of how highly precarious conditions of life may locally improve the intelligence of animals.

After drinking, the kangaroos leave the bush and resort to the open eucalyptus forest to feed. They prefer the young shoots of various grasses, but will often dig up with their strong claws and devour the coarser grass roots. Shortly after sunrise they return to the bush.

Besides the crocodile, the species has only one enemy of importance, the native. Thanks, however, to its cunning and the not too perfect arms and methods of the enemy, the river kangaroo is exceedingly numerous, notwithstanding its slow rate of reproduction. The thick bush, where spears cannot be freely used, protects the animals so well that the approaching native may be regarded with equanimity, and in the more open country the speed of the species is a great asset. The native's best chance of effecting a kill lies in firing a piece of land, which is then surrounded by spearmen, who kill the kangaroos as they attempt to escape the ring encircling them.

The traveller will, on most rivers, be surprised at the abundance of these pretty animals. In virgin places their lack of shyness is often striking. If towards dusk he rides through the little plains where the kangaroos feed, he will observe numbers of them hobbling slowly along among the short tufts of grass. At the sound of the horses' hoof-beats they may straighten up and in bird-like jumps move some way off before beginning to feed again. Sometimes the cunning animal will remain stock still and,

trusting to the protective colouring of its fur, will let the rider pass within range of a pistol shot. Everywhere, however, the bush kangaroo falls an easy prey to the European hunter, and in the bush and with good beaters great numbers may be killed. Even in perfectly open forest land the animals may be successfully approached on foot. On discovering a kangaroo grazing, all that is required is to adopt a twisted attitude, so as to resemble a dry stump, and then quietly to approach the animal foot by foot. As soon as the kangaroo rises up to examine its surroundings, the stalker must stand quite still; and when it bends down to feed again he must shift his feet slowly forward, retaining the same twisted pose. With infinite slowness a successful approach may thus be effected and a safe shot obtained.

The following is an extract from my diary :—

“*Daly River, Sunday, July 14, 1894.*

“Rode out to-day with Tommy to examine a large lagoon, of which I had heard. The natives call it Benderang. We passed the Dingeriet and got a young native boy to show us the path to the lagoon, which took us through tall grass and reeds along a chain of longish pools where white and rust-red herons, as well as snake-necked cormorants (*Plotus australis*), abounded.

“There were also some Sheldrakes (*Tadorna radja*). At length the ground became so boggy that we had to leave the horses and force our way on foot through the enormous clumps of reeds and bushes surrounding the lagoon. The latter proved to be literally swarming with birds. Blue water-hens, as large as a black-cock, were flushed in great numbers; ducks were everywhere quacking on the water; *plotus*, terns and herons circled in the air. Wading along the shore through the profuse vegetation of lotus and water-lilies covering the water, we shot a few birds. Finally Tommy asked permission to take my gun and try to approach a flock of large ducks settled about three hundred yards distant from the shore. To my great surprise the water nowhere reached further than his armpits, and after successfully stalking the ducks he killed two out of the flock.

“We had taken only a few cartridges with us on this

trip, and very soon went back to the horses, well pleased at having discovered this splendid hunting ground for all kinds of waterfowl. On the return ride I shot a sheldrake in one of the long waterholes. There were five of them, and although one was killed the others only flew a few yards and then settled down again. Holm fired at them and missed, after which they flew away. A fast gallop took us home to the station.

"In the afternoon we collected a number of small native boys to beat for kangaroos. We got two in about an hour, and had some trouble about the first one. All the boys wanted to eat it at once, fighting like madmen, and even attempting to take it from me by main force. One young scamp, hurrying up from a neighbouring camp, pulled the young out of the pouch of the dead kangaroo and tried to run away with it. I had to restore discipline with a threat of wholesale massacre(!), an argument which promptly settled all disputes; so we continued the hunt successfully, finally going home at dusk, the excited boys carrying the kangaroos before us. Upon approaching the station we heard a great uproar: Father McKillop was arriving, and the hubbub was a greeting of welcome.

"At night a most wild and fantastic scene was enacted. Under the instructions of one of the missionaries all the blacks of the station with their women and children were assembled outside the fence. Long dry bamboos were lit as torches and were carried round the yard by two files of men. Finally they closed up, and the missionary made a speech of welcome to Father McKillop in the Mollak-Mollak lingo. At the end of his speech the missionary cried '*Jytera*.' And from hundreds of throats came a short, slowly rising '*Jyh*' in answer.

"A native then stepped forward and delivered a stuttering and obviously second-hand speech. Next came a song in the vernacular to the tune of 'God save the Queen,' and finally a lusty cheer.

"The ceremony had of course not been arranged on the initiative of the blacks, and, without detracting from the merits of my reverend hosts, I may be permitted to remark that I have never witnessed a more spontaneous and perfect parody on civilisation as well as on barbarism.



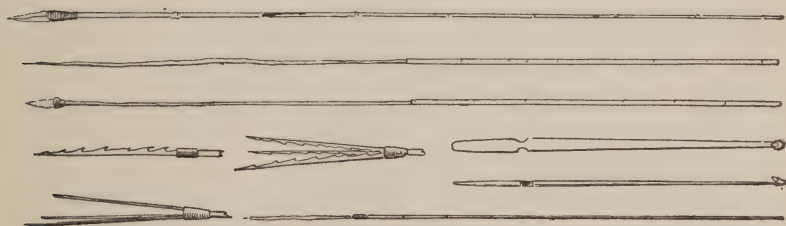
WOMEN, UNIYA MISSION STATION.



GIRLS, UNIYA MISSION STATION.

“McKillop had taken two native boys on his trip south. The mother of one of them was quite wild, behaving like a raving lunatic on meeting her son again. In her company his brothers and sisters squatted round the boy, producing an appalling concert of howls. After the fashion of her tribe, she also began beating her head with a stick, a ceremony, however, which the missionaries soon stopped. When, later in the evening, the boy was standing inside the fence, which the mother was not allowed to pass, I saw her frantically caressing his wrist through the steel netting, her dark passionate face strangely lit by the torchlight. All night I could hear her mad howls. She was like a beast of prey, separated from her cubs.

“The natives live in small camps on the edge of the jungle. At night I can see the lights of their camp-fires, and hear them blowing upon their bamboo horns and singing their monotonous songs. The night is full of sound. Sitting in my little cabin, skinning birds by candle-light, I can hear the opossum screeching in the fig trees by the river, the cuckoo-like voices of owls, or the fine whistle of waterfowl passing overhead. And crossing the yard I can hear the bats chattering just above me. They seldom fly high, nor are there many insects winging their way in the upper air.”



SPEARS FROM ARNHEM LAND.

CHAPTER IV

A TRIP UP THE DALY.

The Daly River is only a continuation of the mighty River Katherine, which rises at a point in the Central Tableland called Flying Fox Creek. Thence in a vast curve it embraces the best part of south-western Arnhem Land, receives the Flora River from the south-west and finally under the name of Daly River flows quietly towards the north-west and the Indian Ocean.

The Katherine, except for its head waters, was comparatively well known geographically. The course of the Daly upwards from the sea had also been charted, but the stretch between the Daly copper mine and the fork of the Flora had never been closely examined. My intention was to make a trip up the river and to attempt to go by boat as far as was compatible with the other objects of my research.

We provisioned for the trip with flour, some biscuits, rice and a few preserves, besides matches, ammunition and tobacco in plenty. As we needed a man with us in addition to Tommy, Father McKillop recommended a native, called Dominik by the missionaries. This man had previously served McKillop, but preferred his personal liberty to the prospect of steady work. He was an exceedingly fine type of aboriginal manhood, standing about six feet, every movement of his slender sinewy body exhibiting the unconscious grace of the savage. His face was to our standards ugly. His receding chin and his thick upper lip were covered with a scanty growth of soft curly beard. But his forehead was perhaps a little higher and his flashing eyes had an expression more intelligent than is common among the natives. He looked, and later also proved to be, full of spirit and daring. When first I met this fine fellow among the tall bamboos of the river jungle I was immediately attracted by him.

On the morning of June 15th we packed our provisions in our little dinghy, and set off upon the rising tide, promising Father McKillop to be back within a month at most.

The fall of the river in the lower course of the Daly is so insignificant that the effects of high and low water in the sea are felt far above Uniya. The rising tide assisted the unsteady strokes of the blacks, and we progressed at a fair speed between lofty banks and mighty trees. As we travelled on some of Tommy's friends were seen marching along the river; and I was aware that they would follow us as sharks follow a ship.

We had not gone far before Tommy began to complain of illness and sat feebly splashing with his oar. He received, however, a peremptory order to pull away, and we rowed on all through the forenoon. Now and again kangaroos were visible on the shore, and I had a shot at one, unfortunately only wounding it; Holm shot a large eagle. Small flocks of jabiru, a gigantic species of stork (*Mycteria australis*), rose at times from spits and sandbanks. They were extremely wild. At various intervals the lithe black forms of Tommy's friends were sighted in the clearings of the jungle.

When we landed to prepare the midday meal, I steered the boat on to the opposite shore to avoid being pestered by Tommy's begging friends. While making the fire we observed the rugged back of an enormous crocodile on a mud bank farther up the river. I attempted to stalk it, but without success, the reptile slipping into the water and disappearing. While stalking I heard a shot from Holm, and, on returning home, having killed an owl on the way, found that he had shot a large jungle fowl (*Megapodius tumulus*), which had been perching on a tree in the dense jungle close to our camp.

The blacks who had followed us now appeared on the other side of the river, discovering us immediately; shouting to Tommy, they disappeared. Within a few minutes a long dugout shot away from their shore. It was one of the common canoes used by the natives, a hollowed-out log of about one foot in diameter and five to six yards long. Three natives occupied it, one man and two half-

grown boys. One boy sat crouching in the bottom of the narrow vessel, while the two others stood erect, propelling the canoe with astonishing speed by means of long bamboo poles. They were very soon across, and landed and squatted silently around us.

Thus we ate our simple meal, the men having their rations, Tommy of course sharing his victuals with his relatives, and begging a larger share for them. This I had to refuse, as, once complied with, the demand would be repeated at every meal, and my provisions, calculated to last four men, would soon run short. Knowing that they could very well live on spearing fish in the river, I promised them tobacco in exchange for any specimens of fish they should bring me.

We continued our voyage, and Tommy's friends remained behind to fetch their arms from the other side. We had, however, not gone far when Tommy grew exceedingly limp, feigning mortal illness. Pulling his oar out of the rowlock, he fell back groaning. We merely kicked him unsympathetically into the peak and let him lie there, while Holm took his oar.

In the afternoon we landed again at the mouth of a creek. Heavy banyan trees and bamboos made a shady canopy over the bed of the creek, now long since dry. Holm and Tommy remained, the one to skin specimens and the other to make supper, while Dominik and myself marched off to reconnoitre. Following the dry bed of the creek, we came before long to a fence plaited from twigs, in the middle of which was an opening about eighteen inches wide. A large balloon-shaped basket was set in the opening, and Dominik told me that this contrivance was employed by the blacks to catch fish on the sinking flood after the rainy season. Their custom was to camp close by—we could still see the remains of their fires—and do nothing else but examine the trap, roast and eat the fish caught in it. Great quantities of fish had obviously lived in the creek.

A little higher up was a depression in the bed, which had evidently contained water not so long ago; the dry bottom was covered with thousands of little dead fishes; as the water disappeared they had expired, and were now

covering the hard bottom of the dry pool in a thick layer. Having followed the dry bottom of the watercourse for some time, we passed the jungle, scaled the steep bank and, through the open forest, sighted two cone-shaped hills of moderate altitude. These hills had been visible from the river, and I decided to climb the nearest of them in order to obtain some view of the land surrounding the river farther up.

Kangaroos jumped up from the grass at long range, as we traversed the little plain separating us from the foot of the hill. We climbed the stony side, which exhibited a scanty vegetation of stunted trees, and soon reached the summit, where a couple of small birds fled before us. The hill was overrun with the paths of the large red kangaroo, and the dry droppings of the animal, resembling the droppings of deer, lay scattered everywhere, but no kangaroos were visible, no sound indicated that the hill was inhabited.

To the east I could see the southern shoulders of Mount Heyward's melancholy tablelands rising gaunt and desolate, their broken rocks and thin stunted trees glowing in the setting sun. Another heavy mountain range loomed blue in the south. Westward from this range and through a gap in it I sighted one enormous forest plain, a horizon as level as that of the ocean, stretching as far as the eye could see. From our feet and to the west and north-west we could see the undulating blue-green roof of a flat illimitable forest, with lagoons and small plains glittering in the sun. The slow waters of the Daly were seen winding peacefully under the cool shades of gigantic banyan trees and bower-like jungles of bamboo. I built a small cairn, leaving my name on an empty brass cartridge-case, and, taking a sketch of the landscape, enjoyed for some time the beauty of the sunset and the vastness of the view. The silence and utter loneliness of the landscape was appalling, only the sharp cry of a cockatoo rang o'er the hillside. Wherever I let my eyes rest on the vast expanse before me, I could discern only one single spot where white men lived.

As we walked down again a few loose stones tumbled rattling down the hillside and startled the kangaroos. We could hear their trampling in the dense jungle below.

- . The camp was soon reached, where a heavy fire was going, Tommy being very busy quartering a nice jungle kangaroo, which had fallen to Holm's gun.

The hard mud bottom of the creek was thickly carpeted with fallen bamboo leaves, and stretching our tired bodies on this simple matting we partook of a hearty evening meal. A continual rattling and jumping seemed to be going on everywhere among the dry bamboo leaves. It proved to be due to enormous numbers of small tree frogs who came out at night and were attracted by our large fire, approaching quite close to the flame. The night was wonderfully peaceful. The river flowed past us silently without any visible current, black and shining like liquid tar.

Sitting at the crackling fire, I suddenly heard the rustle of great wings, and a flock of pure white egrets alighted on a tree in front of us. The last rays of the setting sun flooded the bone-white branches of the tree and the silky plumage of the graceful birds with a rosy tinge. I grabbed my gun. The birds fled with stretched necks and hoarse quacking cries, but my two shots reached their mark, and a brace of our white visitors fell splashing into the black waters of the river. The heavy reports of the gun reverberated between the shores, startling half sleeping birds and animals, and the stamping of terrified kangaroos was heard from the jungle—then silence. Dominik pulled out and fetched the birds, which were welcome as specimens as well as food.

Upon the rising of the moon we packed our things and in the cool night rowed up the river to find a safer camp, our present surroundings presenting every opportunity to enterprising and possibly hostile natives. Plenty of fish rose everywhere on the river, and since the only fishing gear I possessed consisted of a hook and line, I baited with a piece of cotton wool and towed this primitive bait a few fathoms behind us. Very soon feeling a pull at the line, I hauled a nice silvery perch or *terapone* to the boat, but, the hook coming out, I lost the fish, and none of his fellows would condescend to take such an insipid bait.

Passing the site of the old Uniya Mission I noticed the reflection of fires in the treetops, visible over the bank,

and heard the hoarse burr of many voices. Everywhere along the shore voices of men were audible, talking quietly, and very soon I espied a number of natives distributed under the bank. The reflection of the fires grew more distinct as we shot along, and finally the fires themselves became visible, dark silhouettes of women and children standing out sharply against the flames. There was no uproar, only men's voices were heard speaking in short and low-toned sentences. Then suddenly a cracked male voice spoke to us and was answered by Tommy. They appeared to be Wolwongas. But not caring to camp among these ill-humoured knaves, we continued up the river and, to the great disappointment of Tommy, camped on a sand-bank on the opposite shore. The effect of the tides was here almost nil, and we only needed to pull the boat loosely on to the sandy shore.

A great fire from dry bamboos and banyan branches was soon going, and the blacks dropped off to sleep, their naked bodies exposed to the genial glow of the fire. We did not feel over safe, and, dividing the night into watches of two hours, relieved one another like soldiers. But the man off watch had little sleep. For one thing it was bitterly cold, and a peculiar night-bird, as yet unknown to us, was continually disturbing us with weird and diabolic calls.

I walked up and down in the moonlight, my gun in the crook of my arm. My companions looked like dark bundles beside the camp-fire, the flames of which had died down, leaving a red glow. Up and down I marched, the cold of the night penetrating to my very bones. The landscape was dead and dreary, and I seemed to be standing alone on another planet, in the light of a strange sun with a cold blue-white gleam. The only signs of life were the suck of rising fish from the river, and the patter of bandicoots in the thickets on the bank. Suddenly an ugly night-bird settled close to Holm; as he jumped up, it rose, and emitting a ghastly rasping call, disappeared as a grey blurr over the river. When my turn to sleep arrived I had hardly rested my weary head on my bag when I heard a soft rustle of wings and, looking up, perceived a shadow-like form sitting quite close to my head. As I reached for the gun, it flew up and, perching in a tree

on the bank, became outlined against the moon, emitting hoarse and ugly cries. Holm, angrily snatching up his gun, stalked and shot it. It proved to be only a Nankin-bird, a night-heron, possessing a short neck, a heavy pointed beak and large yellow eyes (*Nycticorax caledonicus*), common enough on the coast and the rivers and swamps of Australia.

Listening to the sounds of the moon-lit night in our alternate watches, we were greatly surprised at hearing dogs barking almost everywhere, indicating, as we imagined, the presence of numerous native camps. There seemed to be two dogs in each camp, one with a deep and one with a much more highly pitched bark. They appeared to be continuously barking to each other with short rasping barks. "Wow-wow," "Wow-wow," was heard intermittently about the river all night.

I have rarely seen people laugh so much as our blacks, when, later, we questioned them regarding the surprising number of dogs. The barks were due only to owls (*Ninox boobook*) which occur in great numbers along the rivers, male and female signalling all night with these peculiar calls, so like the barking of real dogs as to deceive anybody.

The daybreak was bitterly cold. With regard to 'cold,' it may be interesting to give the temperature which in these parts produced the feeling of cold. During our trip I generally measured the temperature, and my notes tell me that the highest midday temperature recorded was 90° Fahrenheit, and the lowest evening or morning temperature recorded was 56° Fahrenheit. At this lowest temperature I used to feel very cold, and, in the early morning especially, it was very hard to turn out of the blankets.

After a hurried breakfast we pulled on, and soon passed a small rapid so strong and shallow as to definitely bar all navigation with decked vessels. The effect of the tides was now no longer visible. So slow is the fall of the lower Daly and so flat is the surrounding country, that this rapid, considerably more than 70 miles distant from the sea, barely escapes the effects of the highest tides.

Now and again during the forenoon the river current



SWAMPY LAND BY THE DALY RIVER.



OUR HORSES UNDER A BANYAN TREE.

was very strong against us, and the south-east monsoon, blowing down the river, reduced our progress, at the same time bringing a welcome relief to the heat of the day. The river wound its way along in gigantic serpentines, and its course was by no means as straight as is represented on the map. The shores became more open, and the enormous jungles characteristic of the lower Daly disappeared. Dense bamboo jungles were met with now and again, seldom being, however, of any accountable length or depth. The trees of the river bank now appeared to be growing less densely than on the lower river, the main species being the tea-tree (*Melaleuca leucadendron*) and the casuarina (*Casuarina equisetifolia*), the long leaves of the latter—if this name may be applied to the shoots of this ancient cryptogamia—perfectly resembling thin water *equiseti*. The casuarina trees have the appearance of being covered with dark green strings, instead of with leaves, thus producing in the monsoon a sobbing swish reminiscent of the pine forests of the north.

Now and again one sees Leichardt trees and large rugged banyan trees, the enormous aerial roots of the latter forming quaintly twisted shapes. They resemble gigantic silver grey snakes, partly hanging from the branches of the tree, partly enveloping in their coils the stems and roots of neighbouring trees. These banyans are indeed quite horrible, very often reproducing themselves in a peculiarly uncanny fashion.

A banyan grows by a river. In its vicinity stands a large vigorous gum, forked and with strong twisted branches. One day a fig from the banyan drops into the fork of the gum, or perhaps a small bird leaves the fig seeds in his droppings. Fine earth favours the sprouting of the seed, and a small banyan grows up. Before long the soil in the tree fork becomes insufficient, and the banyan sends out aerial roots, digs them into the gum, and spreads them as strong clinging runners over the stem. Having reached the earth, as the years pass these runners become thick and large, and swelling and spreading send out new roots, winding their strong arms round the unfortunate gum. In the completed banyan the rugged stem is enormous and through the foliage of the banyan the dead

limbs of the gum-tree are visible. The banyan tree is in fact a parasite, a strangler of other trees; and there is a creepy eeriness in the slow deadliness of its embrace.

About midday we camped upon a sandbank, and before long saw Tommy's three relatives appearing on the opposite shore. The river was at this place quite narrow, forming a deep pool under a steep hillock. The natives came along the shore spying for fish, the supply of which was abundant. Suddenly they would stop, align their long spears and send them quivering into the water. Before long they had crossed and brought me an opossum and a couple of large carpet snakes (*Morelia variegata*), for which I paid them handsomely in tobacco. We skinned the snakes, and the bodies were immediately roasted and eaten by the blacks. One of the snakes was full of eggs, and the blacks offered me some of them deliciously roasted in red-hot embers. They were almost the best food I have ever tasted.

The blacks insisting that the open forest and grass lands off the river were full of kangaroos, we arranged a small hunt. There were kangaroos enough, but the beaters were too few, and the kangaroos broke back. They were in fact running in all directions. Fortunately I saw one coming towards me, suddenly crouching in the grass. I stalked up, flushed it and shot it as it ran away. Another kangaroo ran between Tommy and one of the other blacks, who flung his spear at it without the least consideration for Tommy. The spear, missing the kangaroo, sped straight towards Tommy, who remained quite steady watching it. At the last moment he jumped high in the air, the spear passing under him. The blacks are great experts at avoiding a thrown spear by jumping or side stepping, and I have known even white men find this easy, as long as they could see the spear thrown.

Arriving at our camp we heard a shout on the opposite shore. Tommy approached the water's edge a little way above the camp, and immediately we heard a series of horrible howls breaking the midday stillness of the forest. I walked up to see what was the matter. I found Tommy sitting quite still under the river bank, and on the opposite side of the rapid squatted an old man and

a youngish woman, both emitting a wealth of heartrending shrieks. I was now so far versed in native etiquette that I understood the concert to represent the customary tears of joy always shed on the meeting of a friend or relative after a long absence. Tommy said that it was his uncle and his dead brother's wife who cried for him. After some time the yammerings ceased, and a more sober exchange of greetings took place, the various news being shouted across the 100 odd yards of river, which separated the speakers.

This custom of crying upon the meeting of long absent friends or relatives is found in most Australian tribes, and Lumholtz also mentions it from Northern Queensland. Here on the Daly and all over Arnhem Land the custom was universal. When applying the word *custom* I do so with some hesitation. I have indeed never been able to satisfy myself if the crying was only a ceremony, or if it really was the spontaneous expression of the passionate feelings of these primitive beings upon meeting someone dear to them. I am, however, inclined towards the latter view; the tears indeed run so freely, and the howls sound genuine enough. To see a full grown man boo-hooing like a child—and for joy—leaves a curious impression. The white man generally finds it ridiculous and entirely opposed to his nature. But this is, I think, a narrow view. Human nature is the same even in Europe, and there also tears are the highest expression of joy. How many of us have not in our happiest moments secretly shed the tears, which the untamed savage openly displays!

The character of the river now changed. Rapids followed in quick succession, and the strength of the current necessitated our towing the boat from the shore. Here and there we came to quiet pools and finally to a region where for miles the river resembled a long and narrow lake. Long-nosed crocodiles here abounded, diving into the water from their resting places on old logs along the shore. Large flocks of water-fowl flew up from the groves of screw-palms which bordered the river. Dead and fallen trees lay everywhere in the water and heavy branches emerged above the surface.

The long-nosed crocodiles were amusing animals, very

shy and cunning. Young ones, about a yard long, would air themselves on the branches of the trees, and trusting to their likeness to the rugged surface of the branch would allow us to get quite close, but the moment they saw that we had caught sight of them, they were into the water like a flash. These animals were so difficult to observe and so marvellously quick when discovered, that not a single shot fell to our lot.

In this region the collector may come across game at any moment. I remember passing a stout branch standing out from the water. We had just gone by it when one of the blacks pointed to it without uttering a word. Turning, I was just in time to see a long-nosed crocodile dive into the water. The next moment a large kangaroo rose up on the river bank. It had just awakened from its sleep, and, rubbing its eyes with its forepaws, stared at us full of surprise. Upon the inevitable shot it rolled stone dead to the water's edge, one of the blacks jumping ashore to heave it into the boat. We needed meat.

The next moment, looking at the surface of the river, I was aware of a large carpet snake swimming towards us about six or eight yards off. Changing my empty rifle for my gun, I shattered the head of the snake with a shot. Tommy passed an oar under the dead reptile and so hoisted it into the boat.

We camped again for the night on a sandbank. Tommy's friends appeared once more, but at bed-time they were presented with a fire-brand in order to make their own camp. They went about 100 yards off and made three fires, one for each man. We kept watch by turns during the night.

Tommy had been at one time in the service of the police and boasted of having assisted in the capture of several black murderers. All night he kept on telling Dominik of his prowess. The conversation was held in a mixture of broken English and Valli-Valli, Dominik, being from Hermit Hill, not understanding Tommy's Wolwanga tongue and vice-versa. Consequently I was thus enabled to follow the conversation. Among other things I heard him deliver to Dominik a very embroidered and fantastic description of the technicalities of hanging black mur-



VIEW TOWARDS HEYWARD RANGE ACROSS THE VALLEY OF LAGOONS.



HOLM'S CLIFF.

[Face p. 60.]

derers. According to him, a noose was tied around their necks, and being hoisted on to a tree, their legs were pulled until the head came off. Dominik seemed to object to having his leg pulled, at least with such drastic results, and he agreed with Tommy that, under the present authorities, a "black fellow" would be a great fool to kill a white man.

The following morning we moved up the river again, Tommy's friends disappearing for good. The current was in places very stiff, and we had pretty hard work, not advancing many miles that day. Finally we passed up a considerable rapid. Above this a running side-stream entered the Daly from the south. This was the first running tributary seen on the trip, and I named it *Maria Creek*. (When in the following pages I have given names to certain localities the main object is to give the reader the means of orientation. The Australian surveyor and explorer McMinn had some years ago ridden through this region; but in his chart very few places were named.)

Farther up we arrived at a large overhanging cliff on the northern bank, the first cliff I had so far seen on the Daly. We baptised it *Holms Cliff*, and camped between a few tea-trees under the brow of the rock. On top of this rock was a small circular lagoon, where tiny crocodiles fled splashing, as I approached the water. Farther inland was a wide lagoon fringed with water weeds, and south of this rose a fair sized mountain, forming, as it were, one of the last shoulders in the Mount Heyward tableland, finally dropping in precipices and slopes of débris into the Daly.

I climbed the mountain and called it *Mount Rebekka*. Between this and Mount Heyward stretched a wide wooded valley with numerous shallow lakelets, and this I named the *Valley of Lagoons*. In the south and south-west I saw the large mountain range observed from the small hill on the first day of my trip. The bamboo-covered bed of Maria Creek was seen winding through the forest plain towards the foot of the range, disappearing in the large gap. Through this gap the enormous plains to the south were visible. I named this range the Dim-Dim range, being told by Dominik that a native tribe of that

name inhabited this high land. To the west of the river some inconsiderable hillocks rose from the forest-land and in the far horizon I could faintly discern Hermit Hill. Far away to eastward the top of a huge tableland was visible. A sketch map made from the view on Mount Rebekka is appended.

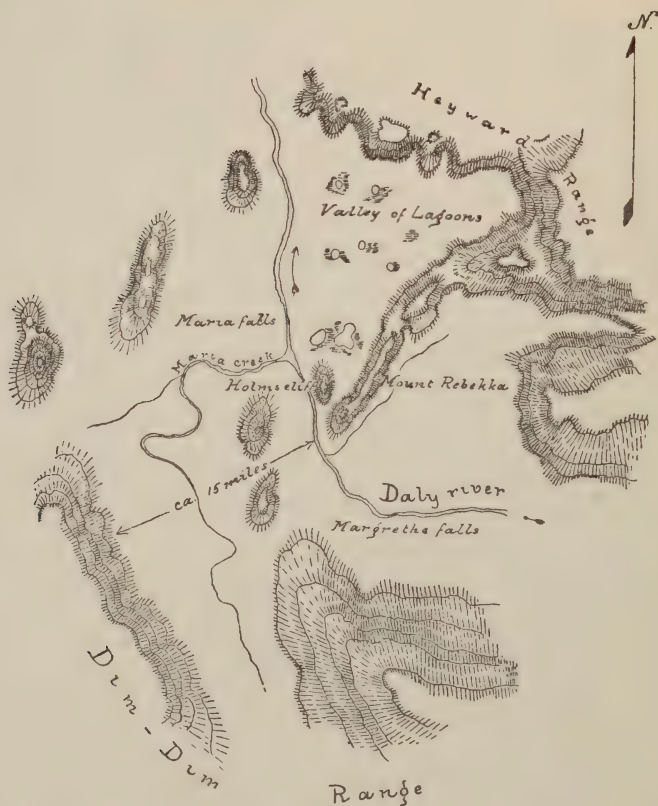


Fig. 1.

SKETCH MAP, SHOWING THE SURROUNDINGS OF MOUNT REBEKKA.

During my absence Tommy had spent his time baking bread in the ashes, and as usual it was very heavy. This bread, the so called 'damper,' is fashioned in the shape of a large flat cake, from one to two inches thick, and is baked by burying it in the red-hot ashes of the fire. This

afternoon I remedied the badness of the bread and the lack of butter by melting the fat of a large carpet snake as a substitute ; seasoned with a little salt it tasted excellent. Dominik also roasted a kangaroo—killed as usual during the day—and treated it according to the rules of the highest native culinary art, cooking it enveloped in bark in a heated burrow in the sand. We had a great feast, Holm and I sharing the tail, which tasted excellent.

During the evening we rested, lazily smoking in the warm sand, half asleep, but pleasantly conscious of the fact that the night watches were to be given up. We were worn out. Tommy's friends had disappeared, and we were resolved to sleep at any cost.

Dingoes were howling dismally on both sides of the river, and the splash of rising fish disturbed the water, where the silvery light of the moon was reflected in little shining ripples. Suddenly we remembered the possible presence of large crocodiles in the pool. There was nothing to prevent one of these monsters coming out of the pool and paying us a surprise visit during our sleep. The thought was by no means comforting. Upon my asking the blacks if they thought there were large crocodiles in the pool, they answered that they did not know, but they would find out. Each taking a large wooden log, they went down to the water's edge, hitting the sandy banks a resounding whack with the logs, at the same time emitting a hollow roar. In this way they produced a strong booming sound reverberating over the waters. This was repeated for some time, when, after listening, they declared : "No more alligator." They insisted that if a crocodile were present in the pool it would roar. The correctness of this statement I cannot endorse from experience. There were crocodiles in the pool, but considerably above us. I ascertained that later on. But I can testify to the fact that the crocodiles roar. When, for instance, the small Johnstone crocodile dives into the water, a sharp gurgling noise is often heard, and the firing of a shot is very often followed by roars from various startled crocodiles. It is conceivable that the noise produced by the blacks on that occasion might be supposed to cause the same effects as a

shot. The great Indian crocodile (*C. porosus*) which mainly inhabits brackish water, and which only makes a sporadic appearance higher up in the river, also emits a loud booming roar. However, we rolled up in our blankets, and this night enjoyed a sleep of indescribable sweetness.

In the morning we continued our way up the river. The surroundings did not change appreciably. The banks were covered mainly with 'paper-bark' or tea-trees and bamboos, the dry hollow stems moaning in the strong monsoon, which during the forenoon swept down the river. Occasional rapids necessitated the pushing or towing of the boat. Then would come long quiet stretches where deep pools alternated with long shallow sands, where jabirus were stalking and crocodiles sleeping in the sunshine. And silently propelling our boat under the banks of the river, we saw kangaroos sleeping on the shore or curiously raising their heads over the bank to look at us. If one were shot the dead animal would come rolling down to the water's edge, rustling the dry leaves and bamboo splinters. Then we would go on. Perhaps a snake would be espied on the shore, while an oar would be pressed over its head from the approaching boat and the black men would pull the creature out, crush its head with a bite, and chuck the writhing body into the bottom of the boat. Or a turtle might be seen between the weeds of the bottom, in which case Dominik would leave his oar, slipping like an eel over the gunwale, and in a few seconds bringing his prey to the surface.

Perhaps a flock of cockatoos would pass by, and if one were shot the rest of these beautiful white birds of the yellow wings would circle wildly over the black water, their harsh cries resounding among the banks, until another shot sent one more diving headlong to meet its reflection in the mirror of the silent water. The echoes of the shots awakened all the inhabitants of the surrounding forest. White, blue and rust-red herons shot out from the mighty tree-tops, with queerly bent necks gliding in slow flight up the river, soon to settle again. The river valley was silent once more, but for the rhythmic splashing of the oars, echoing into the distance.

Rowing along in the afternoon, we sighted a flock of jabirus on a sandbank. Upon our approach they all flew away, except one young bird, which remained long enough for me to get within range of it. A shot in the neck caused it to fall prone and come floating with widespread wings over the golden sands.

Everywhere, as we were gliding along, the beautiful Australian sheldrakes were sitting in rows along the branches of the overhanging trees, undecided whether to fly away or not, and generally offering us the chance of a shot. Now and again crocodiles would rush plunging into the river, or iguanas run pattering through the thicket, disappearing into their holes.

Numerous nests of the snake-necked cormorant (*Plotus australis*) overhung the river, the parents circling anxiously around their young. Above soared the beautiful Australian kites (*Milvus affinis*), emitting their mewing call. The *plotus* also had built their nests in tea-trees overhanging the river. These nests were very simple flat structures made from a few twigs laid crosswise in the fork of a branch. Three young birds, almost full grown, but still downy, sat on one such frail platform, shakily propping one another up. As soon as we approached, they immediately jumped into the water, diving almost as well as young loons. The sun being low, we finally landed by a gigantic paper-bark tree at the edge of a large sandbank.

While Tommy and Holm arranged the camp, Dominik and I walked up the sandbank to look for Johnstone crocodiles. I soon sighted a fair specimen, sound asleep on a sandy point. Very slowly and cautiously I stalked it, crawling behind some bushes. At about twenty yards I took careful aim, sending the bullet through its brain; it rolled over feebly wagging its tail, and Dominik dragged it triumphantly to the camp. While skinning it in the twilight we observed a flock of black and white geese (*Anseranas melanoleuca*) passing, and, the blacks imitating their trumpet-like calls, they returned, passing over us at a great height. In spite of the dusk, I took a gun and fired at the leader, bringing her down in the midst of us from a considerable altitude. This type of goose is very common in the vicinity of water throughout tropical

Australia. The toes are only half webbed, enabling the birds to perch in trees, in which, indeed, they spend much of their time. They feed mainly in or around the large swamps and lagoons left in the plains after the rainy season. Head, neck, back and wings are black in both sexes; breast and belly being white, and the feet yellow. The female is much larger than the male, having a horny process on the forehead. The female is also distinguished by a curious anatomical feature, the windpipe not running straight to the lungs, but continuing under the skin along the left side of the breast almost to the vent. Thence it runs forward, then again back and forward, the whole length of the body, until it finally passes into the lungs. This peculiar windpipe enables the female to emit strong and shrill trumpet calls. The male bird is devoid of this apparatus, consequently its call is only a grunting cackle or a soft whistling, similar to that of ducks.

The blacks were determined to enjoy the crocodile, attacking it with all the energy produced by ravenous savage stomachs. I also tried the flesh. It would not have been bad had nothing better been offered—it would even have been pleasant had not an unsavoury smell of musk been attached to it. Holm and I preferred a recently killed kangaroo, making our meal from the tail. The entrails of the crocodile were very fat and appeared to be the finest tit-bit of which Tommy could conceive. He made from them the most objectionable dish I have ever set eyes on. The ventricle of the crocodile was cut out and cleaned, and then entirely packed with the thin intestines—uncleaned. After burying this promising pudding in red-hot embers and thoroughly cooking it, he cut it in slices, admiring its beautiful structure. Finally, with outward signs of great satisfaction, he enjoyed this mixture of uncleaned guts and fat, relishing it as the greatest delicacy to be derived from the animal kingdom. However unprejudiced I was in the way of food, I realised the necessity of declining his friendly invitation to partake of this course.

Two days' hunting in the vicinity of this camp proved the fauna of the region to be scanty. Along the river we found only common species which were more numerous



A SHOT AT A JOHNSTONE'S CROCODILE.



A STRETCH ON THE DALY RIVER.

lower down. Away from the river one might walk for miles through the sandy eucalyptus-covered plains towards the distant ranges without seeing anything beyond a few kangaroos. Bird life was scanty and only common species were observed. I here saw my first emus, two of these birds running away at a distance. I considered it more advisable to return to Holms Cliff, where among other things I had seen a small macroped, obviously a species of rock wallaby. This resolve pleased Tommy highly. He had been in low spirits all the time, and, producing all sorts of arguments, had tried to dissuade me from going on. As his last trump card he had now advanced a tale about a water monster, a 'bolongo,' a gigantic crocodile inhabiting a certain pool higher up the river, which killed everything that attempted to pass.

While Holm and Tommy were packing I took Dominik some way up the river in order to photograph a small fall. I wished to have a photograph of this beautiful place, as it was the only fall as yet seen by me in the Daly. Its altitude probably did not exceed six feet. I called it *Margaret Fall*.

On my way up, at a bend of the river, I suddenly came across a Johnstone crocodile sleeping in a shallow. I sat down on the slope of the bank and sent a bullet through its head. Dominik dragged it home, while I went on and took the photographs, returning to camp just as the last effects were stowed into the boat. Assisted by oars, wind and current, we landed after some hours at our previous camp under Holms Cliff.

In this place we now lived for a number of days, steadily increasing our collections. In spite of the crocodiles, which we now knew to inhabit the water, we had a bath every day in the shallows at the tail of the pool, choosing, of course, the hottest part of the day. In the afternoon I usually continued the hunting commenced in the morning, generally returning about sunset well loaded with spoils.

I do not intend to relate in detail all the adventures of these excursions. To a certain extent they often had much the same character. But some days spent in the hunting of the aforesaid rock wallaby were very interest-

ing. The first time I noticed the species it was quite accidentally. I had climbed the summit of a wild rocky ridge rising from the sandy plain, and wandering among the enormous scattered boulders of the hill I noticed a small grey animal crouching under a stone. My first impulse was to attempt, like the natives, to capture it with my hands. My intention was, however, speedily frustrated, as the animal whipped off with incredible speed, its long pencilled tail bobbing behind it. Resorting to the gun, I made a clean miss, spent a great deal of time looking vainly for the animal, and returned home very disappointed.

The following morning I took Dominik out to search for these wallabies, but got no further than a sandbank at the foot of the rocks. A Johnstone crocodile was here sleeping on a rock in the bottom of the small bay; I could not resist the temptation, and fired at its head, the shock of the bullet sending the reptile spinning into the water. Not being quite dead, and Dominik grabbing clumsily for its tail instead of for the snout, the crocodile gave a flick of its tail, and disappeared into the black depths of the pool. As we were looking at one another and swearing each in our own tongue, something white appeared in the black pool twisting upwards from the bottom, and the crocodile appeared upon the surface immediately below our feet. I finished it with another bullet, and Dominik, grinning with pleasure, retrieved it.

In the afternoon, when the sun was low, I let Tommy carry my rifle, and took the gun myself and went again to look for the 'betbungo,' as the Wolwongas call the rock wallaby. I had gone a few hundred yards and had just passed over a rock forming one side of a small valley, where a kangaroo path led down to the river, when suddenly an 'old man' kangaroo jumped out of a bamboo thicket. Aiming for the head, I gave it my right barrel, loaded with heavy shot. Upon receiving the charge it turned, disappearing into the bush with unsteady steps. Almost immediately after the report, another kangaroo came jumping down the path and stopped without noticing me, crouching behind a bush. Tommy had been walking in the jungle in order to startle the kangaroos, but now he



HOLM AND DOMINIK, WITH JABIRU (SWAMP PHEASANT) AND
JOHNSTONE'S CROCODILE.



MARGARET FALL, DALY RIVER.

[Face p. 68.]

came crawling just in time, slid the rifle into my hands, and the next moment the kangaroo fell. I ran down to the jungle, looking for the 'old man,' in the place where he had disappeared. There he was, sure enough, dead as a herring. We left them to be brought in later, and continued our hunt.

We succeeded in climbing the wildest part of Mount Rebekka, where it drops into the Daly. Walking carefully among the wild chaos of rocky débris strewing the summit, we had the luck to see the 'betbungo' come out from the broken rocks, dancing in the rays of the setting sun. Without difficulty I bagged two of them and went home conscious of having done a good day's work. My last bag proved to be the *Petrogale brachyotis*.

Many an evening I went over to look at the betbungos and to enjoy the habits of these beautiful little rock wallabies. They live in the torn and rugged ridges, which in this region rise from the sandy forest plains. The territory occupied by a tribe of betbungo may sometimes only be a few acres, and the animals do not seem to leave it, save only to go and drink water now and then. The day is spent in the cool depths of the fissures and crevices between the rocks, and only when the red rays of the setting sun tinge the sharp stones of the hill do they venture out into the open. They do not at once begin to crop the sprouting grass, but generally climb a prominent rock, and from this point, in an erect position, they appear to enjoy the best moment of the tropical day, the short red sunset over the blue hills. These beautiful animals have never heard the crack of a gun, and only rarely have they heard the light spear of the native whistle past them. Nevertheless, when disturbed, they disappear as if by magic; for on their rough-soled feet they slip over, under and between the rocks with astonishing speed and dexterity.

One night when Tommy and I were walking among the broken rocks of Mount Rebekka, looking for the betbungo, we surprised an anteater (*Echidna hystrix*), who was out early looking for food. We rolled the spiky wanderer into Tommy's ragged jacket, carrying it down to camp. Not caring to kill and skin it before we reached Uniya, we confined the animal in an old bag. By accident

this proceeding provided proof of the endurance of the *echidna*. For some reason or other the killing was put off for more than a fortnight. During the whole of that time it had no food, but was evidently quite well, and upon dissection proved still to be very fat. But then it had done nothing but sleep for the last two weeks.

Tommy and Dominik had rather a good time. In the day, of course, they had to do a certain amount of work. But every night they spent feasting. They gorged themselves with game, and far into the night they would sing queer monotonous songs to the droning music of Dominik's bamboo horn.

There was only one drawback to Tommy's and Dominik's happiness and wellbeing. They had no other blacks to talk to and no friends to share their superabundance of food; they had to eat it all up themselves. And the gastronomic capacity of these two fellows almost defies description. For about a week we shot at least one kangaroo per day, weighing up to forty or fifty pounds. Then we killed three crocodiles six to seven feet long, and many geese and other birds. Practically all of this was consumed, in addition to our bread, etc.

Dominik was always in excellent spirits, this being obviously the treat of his life. On the whole trip he had been stark naked, except for an old red rag dangling from his belt. The nights being very chilly, he complained of the cold, envying Tommy some old clothes which I had given him. Consequently Holm found him an old pair of trousers, and when Tommy made him a present of an old singlet, black as coal and as full of holes as a fishing net, he squealed with pleasure, swearing his wife would never recognise him.

Our load of skins and other preserved specimens was now so large that on the 23rd of July I resolved to start down the river again the next day; everything was cleared up and we went to bed early in the evening.

In the middle of the night Holm woke me up, pointing to the branch of a tree slanting over the camp. By the fitful light of the dying embers I could see a queer grey bird sitting on the bough. Holm took the gun, and, crawling some way off to increase the range, fired. The

bird made a slanting dive straight on to the stomach of the peacefully sleeping Dominik. Waking with a yell, he grabbed the bird and brought it to me, laughing. The bird was still alive, proving to be a *Podargus* or giant nightjar. Upon my opening its tremendous beak it bit me in the thumb, only relinquishing its painful grip when Holm forced its jaws apart with a knife. We killed the bird, and to the further credit of Dominik's presence of mind be it noted that no shot was found in the body when Holm skinned it the following day.

Next morning, before embarking, I took Dominik a short trip up the river, intending to try a last chance of a shot at the monster crocodiles inhabiting the pool. We reached the rocks where I had shot my last Johnstone crocodile and climbed to the top of the little cliff. On the opposite shore I spied a monster slowly diving from between the reeds. The luck was apparently against us, but nevertheless we sat down and waited. All of a sudden a great and rugged head shot on to the surface about forty yards away, moving slowly up the river. The express bullet struck it in the neck, and the monster, turning its white belly upwards, sank slowly and stiffly without a splash. We had, however, no time to wait for it to rise. Two months later I met Tommy's old uncle—previously mentioned—who told me that some days after our departure he had found the giant stranded at the end of the pool and had for days feasted on the putrid carcase.

We packed all our belongings into the boat and, aided by the current and the monsoon, in due time reached the Uniya Mission station.

CHAPTER V

HERMIT HILL

At the moment there was no room for us in the Mission-house, all the cells being occupied, but Father McKillop nevertheless kindly provided us with a shelter.

Beyond the fence was an open shed with a grass roof intended for a kind of club-house for the school children. Being, however, very little used, this shed proved a god-send to Holm and me. We put up walls of corrugated iron sheets, made a door from the same material and arranged a few shelves on the walls. Our beds and mosquito-nets were placed on either side of the door and at the far end of the hut a rough table was erected, surrounded by a few primitive seats. We also made a window, but, no glass being available, there was nothing to prevent prowling blacks from gaining possession of everything within arm's-length of the window. The floor was plastered with mud from the river, Dominik undertaking the dirty job. The house served our purpose, and we made ourselves as comfortable as possible.

I now classified my collections, put the dry specimens safely away under the verandah roof of the Mission-house, or under the roof of our shanty, and recommenced my collecting work in the vicinity of the station. The natives continued bringing in various objects of natural history, and I began making excursions with the gun, collecting birds on a more extensive scale than before.

Several opossums were at this period brought in by the blacks, and one day they brought me an exceptionally large male, having tied its legs with fibre. Placed on the ground before my hut, the poor animal tumbled helplessly about in vain attempts to run away. Peals of ribald laughter from the surrounding natives rewarded its struggles. They were obviously quite unconscious of the pain they were inflicting on the poor brute, seeing only the comic



Kimberly
Orizaba, Oct 1894

OUR HOUSE AT UNIYA.

side of the incident. Very often the easy appreciation of the comic or ridiculous, which is peculiar to the natives, leads them to inflict such cruelties upon defenceless animals. A native may thus very well rip open a live lizard and let it run, only in order to enjoy the sight of the reptile running about, dragging its entrails behind it, to his mind a very ridiculous proceeding. The unusual, the monstrous, always evokes the mirth of these people. The misshapen foot of a slaughtered bird may throw them into very paroxysms of mirth. For instance, tremendous laughing fits may attack them when, roasting a dead bird, they observe its feet curiously distorted by the heat of the fire.

One day a native named 'Jingo' (the crocodile) came to me, carrying a small mammal and three quite young ones. He called the species 'djinnjokma,' and examination proved it to be the large Australian water-rat (*Hydromys chrysogaster*). He had—I mention this as an instance of the callous attitude of the natives towards animals—broken the front teeth of the rat to prevent it from biting, and carried it still alive, dangling by a string of fibre attached to the hind legs. This rat is very strong and savage, biting like fury. I ended its sufferings in alcohol. Except for a few young ones which I obtained on subsequent occasions, this was the only adult specimen that I saw. The species is fairly numerous in almost all lagoons, rivers and creeks in Northern Australia, but being nocturnal creatures the rats are very seldom seen, and even the natives appear to have great difficulty in capturing them. The holes of the rats are to be seen everywhere along the banks, after the fashion of the European water rat, and they appear to feed mainly on fish and crustaceans, the remains of these being found outside the burrows.

Between the copper mine and the Uniya Mission there was a small Chinese garden, previously mentioned. On my excursions I sometimes visited this place. The garden consisted of five to six acres of partly fenced-in soil, which had once been cultivated, adjoining a horse-shoe shaped inlet from the river—'The Horseshoe Billibong.' In earlier days, when the mine flourished, the cultivation of the garden had given occupation to numerous China-

men. Now the garden was going to ruin. Only one man, Ah Lin, now lived in the dilapidated house built of bark and poles, eking out a precarious living by growing and selling vegetables for the few Chinese workers on the mine.

This old garden was said to have been the scene of various uncanny incidents not so very long before. When the Chinamen were numerous enough, they took very drastic steps to put down the stealing of vegetables, practised by the natives of the neighbourhood. They used to fire at them and capture their women, and about a year before—so I was told—they shot a native, cut him up and threw him to the pigs in order to stop the continual thieving of the blacks, which constituted a constant source of loss.

Of course these Chinamen were coolies of the lowest class, and their acts of violence towards the natives were probably dictated by mere cruelty and hatred of the blacks who for their part utterly despise the Chinaman and think they can do as they like towards him. Shortly after this act of violence one of the Chinamen took his gun, went over to the native camp, and without any preamble shot one of the blacks against whom he had a grudge. The other blacks then prevented the Chinamen from burning the corpse, threatening to spear anyone trying to approach, and keeping watch until the police, after considerable delay, could arrive on the spot. The Chinamen threatening to shoot anyone who should venture to go to Palmerston as a witness, only two natives could be persuaded to go with the police. The coolie in question was accused of murder, but as a judge then had to be fetched from Adelaide at great expense, it was deemed expedient to charge him with manslaughter, a crime which could be dealt with by the Palmerston authorities. He was, however, acquitted. This was the version of the case given to me, but I cannot guarantee its truth. One thing at all events is true. Shortly afterwards the blacks butchered another Chinaman just outside the garden.

Very soon I prepared for another excursion. The natives had told me about three mammals named 'bungeri,' 'jirian,' and 'nundjala,' all said to frequent

Hermit Hill south of the Daly. From their reports I was led to believe that 'bungeri' was a small burrowing kangaroo or wallaby, 'jirian' possibly a species of *Myrmecobius* (marsupial anteater), and 'nundjala' a long-tailed species of the phalanger or opossum tribe. The reports varied a good deal, and in certain cases it was very difficult to converse with members of the Hermit Hill tribe, the words 'tobakka' and 'metchit' comprising in most cases the extent of their English.

Dominik and another native, named 'Cabbage'—probably because his head had the spiritual properties of the aforesaid vegetable—were almost the only ones of the tribe able to understand me. But even their reports could not be fully trusted. When a wild and unspoilt native tells something spontaneously, his words may as a rule be depended upon to convey the full truth. But upon cross-examination, his answers will very often depend upon his ideas as to what the white man will be pleased to hear. If he thinks that a 'yes' will be pleasing, he says 'yes.' And if he thinks he can gain something by a 'no,' he replies in the negative. To make a native tell the truth one must give him the impression that the question is irrelevant. He must be asked quite casually and in such a way that he cannot answer 'yes' or 'no.' Very often it is useful to guide the conversation in the desired direction, making him unwittingly blurt out all he knows. The necessary tactics, not easily described, can only be arrived at through many disappointments and a long companionship with the natives. For these reasons I felt in no way satisfied as to the existence of all the mammals now reported to me by the blacks, but trusting that there might be something in the reports, I resolved to go and find out.

The distance to Hermit Hill had to be traversed on foot, as it would mean too much trouble to take our horses across the river. We engaged Dominik, Cabbage, and a Mollak-Mollak by the name of Jingo, besides three other blacks, one of them answering to the name of 'Pono.' They were to carry our outfit and provisions, which consisted merely of a little preserved meat and biscuits for our personal use, and some rice, fifty pounds of flour and

a bag of sweet potatoes for the blacks, also tobacco in sufficient quantities. Otherwise we trusted to our guns to provide the staple food. The region now to be explored by us was considered by no means safe, the missionaries warning us to keep our eyes open, especially in regard to the 'Dilik' tribe, living south of Hermit Hill on the Fitzmaurice river divide. There were, according to the missionaries, but a few trustworthy men in this tribe, the remainder being complete savages who would stop at nothing, if they thought it to their advantage. The missionaries themselves had several times had to beat off night attacks from this tribe.

On the morning of the 8th of August we packed everything in our boat, crossing five to six miles lower down the river in order to avoid marching through the thick bush. We had taken a boy to bring the boat back, and our six porters, taking a short cut overland, appeared at the appointed ford soon after our arrival. After ferrying them across, the boy returned towards Uniya with our boat, and we commenced our march through the limitless plain country. The enormous grass flats close to the river gradually changed into a low scattered eucalyptus-forest mingled with *Lewistonias* and screw-palms. After some time the summit of Hermit Hill appeared, a hazy green on the last wavy line of the distant horizon. After a short midday rest we continued our march through the flats over the cracked bottom of an immense lagoon, but recently dried up and still covered with decaying rushes and weeds.

A few wild bustards ('turkeys') (*Eupodotis australis*), a couple of kites (*Milvus affinis*) and some grass birds were the only living things to be seen.

In the afternoon a native was observed on the far horizon of the plain like a small black dot. My companions yahooped and signalled to him, and while we were marching along he trotted up diagonally to our small troop. He carried a spear and woomera. After a few words he was presented with some scraps from our meal and squatted to devour them as we passed on into another change of scenery. Very soon we were again surrounded by low scanty forest growing from a sandy soil ; a blazing sun was

reflected from the stiff leaves and the twisted white stems and branches of the trees.

Wherever you turn the forest has the same appearance. Nothing living stirs, no bird sings, no breath of wind stirs the foliage. The stillness is intense. Only the padding of the hard, naked feet of the blacks and the crunch of our iron-shod boots break the silence of this open forest, as we pass by. We march rapidly in Indian file, now and again taking a short rest, but always marching until we arrive at a pool, overshadowed by a mighty paper-bark tree, where all lie down, drinking the greenish water. In the dark crevices between the roots of the paper-bark the lowish temperature of the water cools our thirsty throats like ice.

We march again, hour after hour, until the land begins to rise in undulating stony ridges where the *Lewistonia* palm and a few crippled eucalypti form the main vegetation. Then finally Hermit Hill, high and rocky, appears suddenly quite close, and another hour's marching takes us past an enormous swamp, miles wide, on which are visible thousands of geese, ducks and water-fowl of every description. Passing through a belt of thin forest, we arrive at the site of the abandoned Mission station on the Serpentine Lagoon.

The only remains from the old station were the fireplace and a few sheets of galvanized iron. From these latter Holm immediately set to work to build a shelter in the shade of an enormous banyan tree. In the meantime I took my gun, and allowed Dominik to carry my rifle, intending to reconnoitre the neighbourhood and to shoot something for the pot.

We soon reached the shore of the lagoon, which wound along with little bays and sounds between low shores, where screw-palms were mirrored in the black waters. After the heat and dirt of the day the mere view served as a restorative. The place possessed a virgin freshness and beauty which made the water appear more clear, the water-lilies more blue, and the foliage greener than anything seen before.

As Dominik and I were approaching the shore, we saw a long dark canoe gliding along under the low over-

hanging screw-palms. In it were three children, and, hearing us, they cowered down so as not to be seen, wild as the animals of the forest. However, upon recognising Dominik, they poled in to the shore, laughing, and began to speak to us.

Two small boys sat in the prow, and in the stern of the canoe a young girl stood erect, straight as a reed, leaning lightly on a fish spear. In the bottom of the frail boat a number of freshly speared fish were floating in the bilgewater, and, recognising species which I had previously attempted in vain to procure, I asked the girl to heave them ashore to me. This done, she commenced to bale out the canoe, an operation which she performed standing. With one foot she simply kicked the water against the other foot, making it squirt out of the narrow boat. The whole view was one of a peculiar and virgin beauty; the still, narrow lagoon with cerulean lilies floating on the black water; the dusky body of the girl sharply defined from the long dark canoe against the lake, and the spouting water glittering in the low sun, coolly splashing on the surface, and so turning black as the lagoon.

Having sent one of the small boys up to the camp with the fish, we proceeded along the shore of the lagoon, where *plotus*, cormorants, ibis, ducks and smaller waterfowl swarmed, besides myriads of cockatoos. The flocks of the latter appeared to cover the plains like enormous patches of snow. Here and there the Australian crane, or 'native companion' (*Grus australasianus*), was seen on the wing, far out of range.

A few well directed shots into this wealth of edible game secured a couple of substantial bunches of birds for the kitchen, besides some specimens for my collection. Returning then to our camp under the banyan tree, we found that Holm had already completed the frame for our temporary hut or shelter.

Practically all the blacks of the Hermit Hill tribe were now assembled about the camp, and although I had seen a good many of them before, the sinister expression on most of their faces appeared by no means reassuring. Dominik acting as interpreter, I now began to inquire about the prospects of obtaining the mammals on whose

account I had chiefly undertaken the trip. I gathered that the 'nundjala' was very plentiful and also that the 'jirian' was probably obtainable. But my questions as to 'bungeri' only produced an uncomfortable silence. After much talk it finally transpired that 'bungeri' was very far from being a burrowing macropod, as I had been led to understand, but was simply the name of a fruit, which at a certain season is largely eaten by the natives. Bungeri or bungara, in the language of the tribe, also means food.

We ate our evening meal, and at sundown I presented the aged headman of the tribe, named 'Gui,'* with some tobacco as a token of peace and friendship, reaching him also a firestick as an intimation to make his own camp.

The mosquitoes not bothering us, we sat at the fire, or rather fires—every black making his own little fire—smoking and conversing until the monotonous song of the natives died down, the fires burnt low, and drowsiness overcame us. Rolling up in our blankets and putting our revolvers and guns handy, we slept the light and intermittent sleep peculiar to this Australian bush. Instinctively one wakes a little before sunrise, especially when one is uneasy about the natives, who are said to choose the break of day for an attack.

After a hurried breakfast in the early morning, I sent two of my men out to capture 'nundjala.' Holm continued his camp work, and I went out with Dominik and Cabbage and a couple of small boys, who came sneaking up from Gui's camp as spies for the tribe.

Whenever a white man is camped close to a native settlement he will always, at meal times, notice one or two very small boys coming up to his camp and quietly sitting down, making themselves as inconspicuous as possible. With bulging eyes these boys will stare greedily at everything eatable, until one of the blacks throws them a bit of 'damper,' which is instantly divided and devoured. Soon after, a larger boy stalks up from the camp, also sitting down in the same unobtrusive way. After him follows an old woman offering the fruit of water-

* Gui is the native name of a gigantic silvery perch, which frequents the rivers of Northern Australia (terapon.)

lilies or fish in return for tobacco. Then comes an old man, who poises himself on one leg, resting the other foot against the inside of his knee, propping up his hindquarters with a woomera or throwing stick. He will stand there for some time, but as soon as he stalks over to your fire and squats down, within five minutes the whole tribe will be there too. It will take about half an hour to drive them away, and you have to be careful not to leave a single small boy, or the whole episode will immediately recur.

I took the two men and the two boys down to the Serpentine Lagoon. In a short time I shot some birds I wanted for my collection, among these a rare species of fly-catcher, and, sending the boys home with the birds, continued with Dominik and Cabbage along the lagoon. Now and again we shot a cockatoo or a duck for the kitchen. Every time a duck was shot in the water the blacks would retrieve it, returning to the shore complaining of the coldness of the water. Their chattering teeth and shivering bodies were proof enough of the genuineness of their discomfort, but, testing the water, I personally was unaffected by it. But the natives seem to be more readily affected by changes of temperature than we whites. Bathing or swimming in lagoons I have often heard the blacks loudly complaining of cold when, alongside them, I have myself found the water unpleasantly warm. The Australian aboriginal must have a more sensitive nervous system than the white man; or perhaps he lacks the controlling powers of reason, which enable the white man immediately to overcome the momentary repulsion caused by changes of temperature. Whatever his feelings were now, however, as to the temperature of the water, Cabbage had to retrieve ducks, while Dominik, nosing about among the screw-palms, captured a small long-necked turtle (*Chelodina oblonga*) hidden in a hole.

Having in vain attempted to stalk one of the mighty cockatoo flocks, we cut a bee-line through the forest plain, approaching the large swamp seen on our arrival. This enormous shallow or weedy lagoon appeared to extend towards the far western horizon and was practically covered by black and white geese and other water-fowl. The birds being pretty wild, I made a cautious stalk towards the near

edge of the swamp, killing one goose at long range. The shot caused some disturbance among the thousands of birds which covered the water in enormous flocks. There was no chance of a successful stalk except by crawling or swimming through the shallow water, and Dominik being very keen to attempt the job, I lent him my gun, sitting down myself with the rifle to watch for possible stragglers.

It was most interesting to watch the black man stalk snake-like through the water and the rushes. He first of all made an attempt at a flock whose position necessitated a stalk without much cover. When he was very nearly within range, a goose gave a warning cackle, which alarmed the rest, and rising they soon joined the main body of the geese visible behind the taller rushes. With only head, shoulders and gun out of the water, Dominik now slid towards the geese. A goose would now and then set up an uneasy cackle, seconded by more alarmed notes; some would rise and then settle again, an element of doubt seeming to hold the enormous flock on the brink of decision. As Dominik slid closer still, there rose a cackle from the thousands of birds, which steadily increased in volume, swelling to a mighty roar of alarm, a very tempest of sound, as if the peals of a gigantic organ had been swept towards you by a great gale. Now the vast plain was one sheet of black and white wings moving in flight. A pencil of smoke shot out from the reeds, then followed the report, dull and dead without echo through the limitless plain, and three large geese fell.

Upon arriving in camp, we found that the two natives who had been sent out to look for nundjala had returned without any success; it was apparent that none could be expected unless I supervised the work myself, so after a meal and a short midday rest, I ordered most of my men to set out with me again.

I first shot some ducks and other water-fowl in a small lagoon not previously visited. The ducks here were so plentiful, that, missing one bird on the wing, I accidentally killed another some distance away.

These ducks were mainly 'black duck' (*Anas superciliosa*), a large dark brown species, closely resembling the

mallard, only considerably darker. They were seen in small flocks. The main body of the water-fowl, however, consisted of the 'pigmy goose' (*Nettapus pulchellus*), about the size of a teal. The breast and belly were speckled grey, the back, neck, head and wings being greenish-black with a metallic sheen. The whole expanse of the little lagoon was dotted with flocks of these beautiful little geese. As they dived and bobbed among the weeds, seemingly without fear, one could walk straight up to them, often getting several at one shot.

Wandering along the lagoon we had met a good many blacks belonging to the tribe. As usual, they immediately left their fishing or foraging among the water-lilies, in order to join the white man and get a few pulls at a pipe, throwing all care of food to the winds. These blacks now followed us, exulting whenever a duck dropped to our shots, and acting as keen retrievers. For some time we moved on thus along the lagoon, shooting until we had enough game for our evening meal and breakfast. During the latter part of the shoot Dominik had taken up his position by an adjacent lagoon, where the ducks appeared to take refuge when frightened by my shots. Before he came back to the camp he lit a tremendous grass fire, apparently for no specific reason. Hearing him, upon his return, remark something to one of the other blacks, I asked him what it was about. He said that where the fire now was he had seen some small ant-hills built of a certain kind of earth which, when burnt, yielded a splendid brownish-red powder. For this reason he had lit the grass fire. A couple of the natives consequently went over, shortly returning with a large tray of bark filled with a fine ochre-like powder. Several of them immediately and with obvious satisfaction began to anoint their bodies with this paint. Happy savage! To get a pound of paint to satisfy your modest vanity you do not hesitate to burn a square mile of land!

We passed some burnt plains and arrived at a large patch covered with long and dry grass. The blacks insisted on burning this patch also, in order to catch the bandicoots which might be hidden in the grass. Two of the men fashioned large grass torches, and, having lighted them, ran very quickly in a half-circle round the patch,

several hundred yards in diameter, firing the grass as they ran. We manned a line of posts to the leeward of the fire, the natives arming themselves with sticks, branches, and other fortuitous weapons. The flames very soon rose as high as the tallest trees, and dry and burning grass flew into the air amidst the clouds of smoke. There was enough fire to drive out and to roast a million bandicoots, but none was seen.

On this occasion I noted a certain phenomenon which appeared to me very interesting. As soon as the grass was well alight, birds of prey appeared in considerable numbers. The majority were obviously Australian kites, and they sailed in and out of the vast columns of smoke. Every now and again they stooped into the grass, grabbing something edible. The nature of their prey was, owing to the distance, indefinable. After the fire had burnt itself out these birds circled for some time over the smouldering earth, finally disappearing into the forest.

Whenever the grass is set on fire in this region, the same phenomenon habitually occurs. As soon as ever the smoke rises, birds of prey appear, very often in large numbers. Without doubt they are mainly attracted by the multitudes of grasshoppers, small lizards and mammals which fly before the flames. The number of these birds which gathers round the fire shows that they have travelled great distances, guided without doubt by the sight of the rising smoke. Throughout Australia, where the grass is burnt this phenomenon is a constant one, and even in South Africa I have seen the same thing. There, however, they proved to be the peculiar starling-like birds, *lamprocolius*, and as far as I can remember the *lamprotornis*, who feasted on the large numbers of insects escaping from the flames.

According to the unanimous evidence of the natives, the nundjala was said to sleep in hollow trees, so as soon as the heat of the day abated we commenced looking for the animals. The blacks were now strung out in a long line, and marching through the forest in open order we examined every hollow tree we met. To sound one of these for possible occupants may seem a simple affair; but the beginner will soon find that the process is not

as easy as it looks, demanding acute observation and knowledge.

As soon as a hollow tree is found the bark is first of all examined for fresh tracks, *i.e.*, marks from the claws of animals. If such marks are observed, the hunter climbs the tree and the hollow trunk or limb is sounded with a wand. The movements of the animal may then be felt through the wand. In the case of no movement being felt, but suspicions continuing as to the presence of the animal, the native hunter moistens the end of the wand, and lowering it again twirls the instrument round. If a few hairs then stick to the moist wood, the hunter has good reason to feel sure of the presence of his quarry. But the native nevertheless makes doubly sure by smelling the wand, before proceeding to chop a hole in the trunk, after which he may at length pull the animal out by the tail.

Notwithstanding a vigorous search, we had no luck for a long time, and I had almost given up the hope of seeing the animal that afternoon, when Cabbage arrived carrying a specimen tied with a strip of fibre and securely held by the scruff of the neck. Owing to some clumsiness in putting the animal into our collecting bag, it promptly broke its bonds, ran with great speed to the nearest tree, and, scaling this with marvellous dexterity, perched in the topmost branches. From this point of vantage it contemplated us curiously, obviously content at having so easily escaped from an unpleasant predicament. Cabbage felt his honour highly touched, and upon my raising the gun besought me to let him climb the tree and catch the animal again. But, having no patience with him, I fired, bringing the quarry down.

It proved to be a very beautiful creature, covered with greenish-grey fur and having a black tail with a snow-white tip. The body was about one foot long, the tail being somewhat longer. Closer examination proved it to be a rodent; but the curious appearance of the animal and the virgin locality induced me to believe the species to be undescribed. In this happy mood I remained until subsequent investigations proved the species to be previously known, only a few specimens, however, existing in various museums.

The nundjala proved to be *Conilurus hirsutus*, the largest Australian species of this genus of rodents, which has several other representatives in the Australian fauna. The main colours are as described above. The belly and last joint of the fingers and toes are white. The head is very large, possessing a high and arched snout, long whiskers, black protruding eyes, long upright ears and formidable incisor teeth. Judging from my list of specimens from Hermit Hill, the females appear to be more numerous than the males, only two of the latter occurring among eleven specimens collected. Later on I came across the species in many localities; it is common throughout Arnhem Land. The number of young is invariably two; they are suckled by the mother until they attain a considerable size, adhering with great tenacity to her teats. The animal is a night-feeder, the main food appearing to be the seeds of the screw-palm (*Pandanus odoratissimus*). The nundjala climbs and runs excellently, and it is very difficult to catch with bare hands. The natives, however, hunt them willingly on account of the savoury flesh. The point of the beautiful tail is also employed for ornaments.

Another species of the same genus (*Conilurus penicillatus*), called 'pelke' by the tribe, was also found in large numbers around Hermit Hill. It is about one-third as large as the nundjala. Spending the day sleeping in the corners of the screw-palm leaves, it feeds at night on the seeds of the pandanus fruit. The blacks captured a number of them for me.

The rest of the time spent at Hermit Hill was mainly employed in hunting the nundjala and vainly looking for the 'jirian.' I also had to shoot birds for the collection and provide the necessary game for the pot. As a rule I went out in the morning lightly provisioned for the day, and with four or five of my blacks I roamed through the swamps and the dry forest plains until evening.

To ensure the blacks working properly I had to be careful to keep them under constant supervision and to provide enough tobacco. If this stimulant, which was their one inducement to follow me, ran out, they very soon became downhearted, moving slowly and complain-

ing of exhaustion. In short, they were impossible as workers, but, given a liberal ration of tobacco now and again, they kept in excellent spirits and did wonders. They went to work very heartily, examining the velvety bark of the gums for tracks. Then they would clasp the trunk with their long arms and, pressing the soles of their feet against the tree, they would climb the trunk rapidly with comic frog-like movements. Having reached the branches, they would examine the tree, shouting down favourable news. With a tomahawk a hole was soon chopped, and the animal seen lying in the interior of the trunk. The uncomfortable part of the capture, however, had still to be performed, the nundjala being of a fiery temper and having teeth as sharp as squirrels'. Accordingly the native pokes and prods the animal, causing it to twist and turn until finally the tail appears. That is what the hunter is waiting for. With a firm lightning grip he seizes it, the squealing and protesting animal is pulled out, and, being whirled mercilessly round in the air, is soon overcome by vertigo and lands in the collecting bag.

Besides the mammals mentioned, they usually captured a good many snakes *en passant* in the hollow trees. On these occasions I could but admire the marvellous keenness of their senses. They would suddenly stop, and, lightly tapping or flipping a hollow trunk, they would put their ear to it and, after listening intently, declare the tree to contain snakes. Having chopped a hole, they would haul out one or several large carpet snakes (*Morelia variegata*), killing them stolidly after the native fashion. The man grabs the snake by the throat, puts its head into his capacious mouth, and with a bite and a pull severs the neckbone. The reptile's beautifully coloured coils, even in the throes of death, play round his black limbs.

Upon camping at midday in the shade of some trees, our store of snakes and lizards was roasted and eaten with ravenous appetite, together with our scanty supply of more civilised provisions. I must confess to being by no means an idle spectator at these barbaric feasts, eating my substantial portion of snake with the greatest pleasure and satisfaction.

One night some natives belonging to the Dilik tribe

arrived at our camp. Among them was Dominik's wife, who had been spending some time with her father, a venerable native by the name of Aalkan. Dominik introduced me with evident pride to his father-in-law. Several other members of this tribe also arrived during the night, as they were preparing to move for the great inter-tribal gathering of all the races of Western Arnhem Land, now shortly to be held at Uniya. Aalkan was obviously considered to be the head man of the tribe ; but the extent of his power over them I do not know.

The fine qualities which placed Dominik far above any other native I met in this region, were highly apparent in his relations with his wife. Mutual affection is very rarely noticed between man and wife among these natives. As for the man, one is struck by his rough and commanding, almost ungracious attitude. He generally considers the woman his mere property, his to treat as he likes, unless she is large and strong enough to suppress him. Most of the women of these tribes are muscular and of generous proportions, and I have not infrequently seen marriages where the woman had the whip-hand. Between physically well-matched individuals there is often a constant strife for supremacy, and the petty squabbles of married life are part of the everyday occurrences of the native camp. Between Dominik and his wife, however, relations were obviously of the best. They appeared to be blissfully in love with one another, and I have never seen civilised lovers meet with more apparent signs of gratification than these wild children of the primeval forest. The outward signs of their love are entirely different from those of white men. The aboriginal never kisses his wife or his child, the dog being the only member of his household on whose nose this love-token is bestowed. He embraces his dearest friend, and rubs and scratches his nose as the highest token of joy at their reunion, but when man and wife meet again after long separation the customary tears of joy are shed.

Dominik and his wife had not seen one another for many weeks, and in the evening they sat at their little fire facing each other. As I strolled through the camp, talking with several of my men, I stopped at Dominik's



AÁŁKAN AND HIS FAMILY, HERMIT HILL.



CAMP AT WATERHOLE BETWEEN HERMIT HILL AND THE DALY RIVER.

fire. He let his hand slip along the side of the woman, and, looking at me with shining eyes, said: "My lubra." And the woman looked up at me with laughing eyes, and, stooping over the little fire, softly and bashfully stroked her man's chest and arms. And in the night, when the fires had burnt down to smouldering embers and all the others slept, I started up suddenly, awakened by some bird. Dominik and his woman lay on the hard soil before the dying fire. Their bedchamber was without walls, but that was not my affair. I turned over and went to sleep again.

These two were quite inseparable during the following days, and wherever Dominik went his wife went too. A mongrel cur of European origin followed them everywhere, and the childless couple had showered all their affection upon this dog, who was spoilt to the extent of having to be carried when he showed signs of fatigue. To my surprise I discovered presently that this animal was completely lacking in cheek-teeth, and I later ascertained that the blacks almost invariably break out the cheek-teeth of their dogs, leaving only the canines and incisors. The consequence is that the dogs can only grab and hold on to the game hunted, not devour it, the lack of the cheek-teeth making that impossible.

European dogs had, however, barely reached these tribes. As a rule they were without dogs, or they employed only dingoes, who had been captured young and who were but imperfectly tamed. Cabbage had a dog of this kind, which at present lived with his parents of the Dilik tribe, camped close to us. The dog often followed Cabbage over to my camp and was pampered and petted in every way. It was rather suspicious of me, and when I wanted to stroke it Cabbage muzzled it with a vigorous grip. It appeared to be completely independent, disappearing at night to prowl in the neighbourhood of the camp. This was a constant source of anxiety to Cabbage, who feared that I should mistake it for a wild dingo and shoot it.

Our provisions were coming to an end sooner than I had anticipated. To remedy this I bought various native food-stuffs in return for tobacco. I also despatched two

runners to Uniya for fifty pounds of flour, sweet potatoes, tobacco and clay pipes. On despatching these runners I sent a letter to Father McKillop, asking him to hide the tobacco in the bottom layer of the potatoes.

A letter of this kind intended to be sent by runner is prepared in the following way. The message is written on a notebook leaf, which is folded several times. You then cut a short stick, split the end and put the folded paper into the split, finally lashing the end of the stick firmly with string. Then the native has a fine handle to the letter, which prevents him from forgetting it, and also from soiling it past recognition.

I sent Jingo and another man off for Uniya in the morning, and before evening they were back, bringing the articles required, the distance travelled being more than forty miles.

The blacks knew that I had sent for tobacco, and my precautions in ordering it to be hidden among the potatoes proved justified. When in private I emptied the bag, returning from our shelter with the tobacco, Jingo exclaimed, "Where you got 'im, me look 'im all about?" Jingo, by the way, was a great rascal and scamp, and Holm conceived a deep aversion for him. One hot day they were down at the lagoon together, enjoying a swim. When Holm was dressing, Jingo, stark naked, begged him for his moleskin breeches. The garment in question being his only pair, Holm of course declined. Jingo then declaring his intention of immediately possessing himself of the trousers, Holm had to pull out his revolver, with the desired effect. Strained relations continued to prevail between them, and whenever Holm's mind reverted to the possible loss of his only pair of breeches, he would regale us for days afterwards with choice specimens of his English and Norwegian vocabularies.

When hunting through the forest in the company of Dominik and Cabbage I was at first greatly troubled with thirst. As soon as one got away from the lagoons and entered the forest plains and ridges, from which Hermit Hill arose, no water was to be found. The soil appeared everywhere to be only sand. The blacks, however, showed me how to obtain water. The small open plains, which

were a fraction lower than the surrounding forest, had probably contained some water during the rainy season. By stamping the ground they obtained an indication as to the probability of finding water within a reasonable depth. They would then dig about three feet into the sand, when after some time a little milky water would collect in the bottom of the hole.

When out hunting we usually made a signal to Holm informing him as to our return and warning him to be ready to skin specimens. On starting for home we used to light a large grass fire, the size of the fire depending as far as possible upon the proportion of our success. Holm would then know when to expect us, and that we were bringing in so much working material for him.

As far as I have been able to judge, the natives of these parts do not generally employ smoke as signals; but they are great experts at judging the operations of their neighbours from the smoke columns which rise above the forest. Very often they can tell fairly correctly from these smoke columns what their neighbour is doing, what sort of game he is hunting, and where he is going, etc.

It is commonly believed that the Australian native is a wonder of endurance; but on these hunts my impression was that our exertions affected my companions just as much as they affected me. We had indeed very hard work, sometimes walking all day in a blazing sun without much to eat, and upon returning to camp in the evening we were sometimes so tired out that we had no appetite for food before we had rested.

When we got to know the natives better, the evenings became very entertaining. We either had visitors in our camp or we went visiting in Gui's or Aalkan's camps.

Our evening meal generally consisted of boiled geese or ducks with bread (damper) or rice. Now and then the blacks brought fish in return for tobacco. The fish were mainly a small species of catfish (*Copidoglanis*), new to science.* The blacks killed great numbers of them with spears, the heads of which were either made from hardened wood or from iron wire, the remains of the fence round

* *Copidoglanis obscurus*, n. sp. Rendal, 1923, *Nyt. Mag. for. Naturv.*, vol. 60.

the old Mission site being employed for this purpose. The small catfish in question were very good eating, and we also enjoyed the roasted fruit of the blue water-lily, which old Gui's woman, "Mrs. Gui," as Holm used to call her, every day brought us in exchange for tobacco. Supper finished, we lit our pipes, and I often used to sit for a long time listening to the talk of our men and to their queer way of practising their English; most of them knew but a few words, and, as is usual among novices, the bad words of the vocabulary were not in a minority!

One evening I succeeded in noting down the following list of words and phrases in the Hermit Hill language:

leaf ..	..	..	..	wurrur
star ..	..	..	..	miellan
earth ..	..	..	..	mandallait
fire ..	..	..	..	juro
live coal ..	..	..	..	jimjit
bracelet ..	..	..	..	binbin
tongue ..	..	..	..	ngonarr
tooth ..	..	..	..	ngart
nose ..	..	..	..	djininn
eye ..	..	..	..	dori
ear ..	..	..	..	piendokma
curlew ..	..	..	..	bivorr
dog ..	..	..	..	damarr
goose ..	..	..	..	kalmogorr
duck ..	..	..	..	worrina
girl ..	..	..	..	goalak
man ..	..	..	..	tjitji
boy ..	..	..	..	værok
necklace ..	..	..	..	mendorr
woomera ..	..	..	..	lakain
spear ..	..	..	..	pot
spear (with stone head) ..	..	..	..	potja
mouth ..	..	..	..	keæræ
bamboo ..	..	..	..	konbi
beard ..	..	..	..	maruat
eyebrow ..	..	..	..	gonmenang
hand ..	..	..	..	memmak
elbow ..	..	..	..	najirr
paperbark ..	..	..	..	warr

devil	..	..	..	barrang
canoe	..	..	..	vænne
be silent	}	..	..	akma
shut up				
to stink	..	..	..	njokma
head	..	..	..	poita
stomach	..	..	..	mennajak
the stomach digests			..	mæng elkinje dam
corrobborree	..		..	māin
water	..	..	..	wāak
water is present	..		..	wāak oiua
water runs	..	..	..	wāak worrir (II), wāak elle mo gouta
oh (oh my)	..		..	jakara
here is a pipe	..		..	pipe gotua
there is not a pipe			..	pipe dakaja
have you got no pipe			..	pipe angor dakka jainjanga
all right	..	..	..	nambara
moon	..	..	..	nodunn
tattoo mark (cicatrices)	..		..	korreko
hair belt (give)	..		..	mangarti (anginn)
basket	..	..	..	vingara
pouch	..	..	..	kalarr
knee	..	..	..	bungarr
food	..	..	..	bungara
foot	..	..	..	merr
fish	..	..	..	pinja
bring me fish	..		..	pinja gorrer woiagak
give him water	..		..	wāak wojinong anjodei
Johnstone crocodile			..	djingo
Indian crocodile	..		..	ngurngurr

Going through the short vocabulary represented above, we find that the idiom for food and the human knee are practically identical, suggesting possibly an origin from cannibal practices.

I very often asked the blacks if they practised the eating of human flesh. They answered almost invariably that *they* did not do it themselves but the neighbouring tribes did it. Once when this question was asked, they looked sniggering at one of my younger men—the scamp Jingo—hinting that he had some experience in this field.

Jingo then reluctantly, but at the same time with a certain pride, admitted that he had been one of a party that had eaten a fat woman. They spoke on the whole very reluctantly on this subject; but I think there was indeed little doubt that these people now and again had practised and still occasionally were practising cannibalism. I am, however, positively certain that cannibalism is not practised to any appreciable extent, either among the tribes hitherto met with, or among those subsequently encountered in Arnhem Land. Thus the practice of man-hunting, as described by Lumholtz from Northern Queensland, is here quite unknown. If human beings are eaten, it is certainly done quite fortuitously, or from necessity, or possibly during certain ceremonies of which I heard vague rumours, the veracity of which I cannot guarantee. As an instance of fortuitous cannibalism I may mention that, according to the Mission fathers, the natives sometimes made a meal of superfluous babies. At twin or triple births only one child, as a rule, was allowed to live, the others being eaten.

An increasing number of families were now arriving in the native camps in order to join the expedition which was shortly going to start for the great inter-tribal meeting at Uniya. Every night the monotonous drone of the bamboo horns, the raucous song from many throats and the eternal drumming on the laps of the old women were heard to increase in volume. They were practising for the corrobborree. I particularly remember one night when I strolled over with Dominik. The full moon hung large and silent in the heavens. All the small fires smoked and smouldered among the dark groups of native families, sitting around on the sandy and ash-sprinkled soil. Their weapons and utensils leaned starkly against the surrounding shrubs of the sandy plain.

The song and the conversation around the fires stopped abruptly on my arrival. A few small children cried desperately from fear, clinging to their mothers, who were sitting frankly naked round the fires. The only sign of modesty I saw consisted of some women bending back the calf of one leg, the heel sketchily covering their lap. I presented one of the worst howlers among the piccaninnies

with a piece of tobacco, and gave its ugly little head a pat or two, immediately gaining the goodwill and confidence of the whole assembly. A crowd of natives surrounded me, satisfying their great curiosity by feeling my gun, my revolver holster, my arms, legs and my whole body, uttering guttural exclamations of wonder. I asked them to give us some music, and squatting with Dominik and his wife at a small fire I issued a liberal dose of tobacco and a few clay pipes. These were filled and lit, and being passed along, each individual taking only a few whiffs, left a wake of happy and smiling faces.

Then the music began. A man produced a few preliminary moaning blasts on his bamboo horn, followed by a full and deeply droning note, dui-u-iu-dui-dui-u-iui-du, etc. *ad infinitum*. Another man kept time, beating two hard pieces of wood together, at the same time with a hoarse and yelping voice bursting into a song of few and repeated words, the curious melody dwelling on only a couple of notes, then suddenly sliding down into another octave, shortly to rise again to the original and long sustained notes. A few old women now approached the fire, and sitting down stretched their closed legs towards it. On the hollow formed between their stomach and their thighs they beat vigorously with their cupped hands, producing a loud drumming noise, keeping time with the music of the bamboo horn. Very soon all were carried away in a sort of ecstasy, and the air vibrated to the raucous chant of all the male voices, the drone of the horn, the beat of the living drums, and the rattle of the dry sticks. The whole performance was remarkable as to time and precision.

Then a small girl rose and approached the great fire. Grass and a few twigs were thrown on the embers, and the flames blazed up. In the flickering light the girl performed the queerest dance imaginable. She kept her head and feet rigidly still; but her arms and all the rest of her body performed the strangest possible jerks, convolutions and gyrations, keeping in time with the music. There in the firelight she resembled a shining sinuous reptile. The music stopped suddenly and, although no signal was given, in perfect time; at the same moment the bamboo horn ceased, the song died, the beats stopped

dead and the whole crowd burst into loud rejoicings. Having smoked and chatted for some time, they began again, and long after I had left them continued their rattling concert. Far into the night I could hear them, until the moon hung low in the west; then silence fell and the fires died down.

We were on very good terms with the blacks, and it was amusing to listen to these unsophisticated savages entreating me to assist with my gun and revolver in the coming fights which they anticipated at the imminent corrobborree on the Daly. They insisted on not going to the Daly before I left Hermit Hill.

We also visited the Hermit Hill itself mainly to look for 'jirian.' We had not succeeded in obtaining this animal, in spite of the handsome reward of tobacco which I had promised for its capture. The hill was, however, inhabited by numbers of the large red kangaroo (*Macropus antilopinus*). Dominik had previously shot a doe of this species, and I now wanted to get the male animal. To tell the truth, I had the bad luck to miss two or three of these 'old men' kangaroos, who appeared almost as tall as a man. To shoot these extremely swift animals running, with the rifle, is not at all easy; and, however much we tried, we were unsuccessful in getting a jirian. The blacks accounted for the scarcity of the animal by assuming that it had been hunted too much. I learnt, however, that the jirian was simply the common marsupial 'weasel' or 'native cat' (*Dasyurus hallucatus*), and not, as I had previously suspected, a species of *Myrmecobius*.

We broke our camp on the morning of August 13th. Almost all the blacks followed us, only the oldest men and women and a few infants being left behind on the shores of the Serpentine Lagoon. Our following now amounted to more than fifty natives, the long train of nude blacks marching with us in Indian file. All were anxious to be entrusted with the carrying of our things, expecting a small reward in tobacco, and our various belongings, except the firearms, were consequently distributed among our followers, who also carried great bundles of spears in readiness for the brawls at the coming corrobborree.

At the outset all marched with considerable energy.

Very soon, however, women and children commenced to lag behind. Some began to straggle through the forest in various directions, seeking food, and the caravan appeared to be completely broken up. I began to fear that we should never see the majority of our followers, at least not before we reached the Daly. In this, however, I was quite wrong. The natives always march in this fashion. Seemingly they do not care what the various members of the tribe undertake during the march ; but when the head man camps for a rest, the various members come dribbling in as if attracted by some mutual instinct. The fact is that, when marching towards any special destination, the blacks camp according to time-old usage in certain customary sites, and the various members of the tribe converge quite automatically towards these places. In the dry season access to water is very limited, and thirst compelling them to seek the few waterholes, they either meet the main body of the marching tribe or find its tracks. To the sharp senses of the natives these tracks are just as sure a guide as a beaten road is to the civilised European.

Marching at the head of my men, I reached about mid-day the small water-hole under the large paper-bark tree, where we had camped on our march towards Hermit Hill.

By and by the natives came in, tired and worn out, and, depositing their burdens, waded into the little pool. Stooping over the surface, they would plunge in an arm as deep as possible, and, wagging the hand, would cause the cold water at the bottom to swirl to the surface, drinking greedily from the dirty but refreshing fluid.

Small fires sent up their smoke in the glaring sunshine round the little pool, and snakes, lizards, etc., were roasted and greedily eaten. The spoils of the day being scanty, Dominik asked to be allowed to give the whole company a treat of bread. Plenty of flour being still left in our bags, I told him to give them a real feast. Having made a great fire, he began baking for dear life, and half an hour later I saw him brush the ashes away from a 'damper' the size of a moderate grindstone.

This grand and magnanimous gift was received with evident pleasure, and being duly divided among them, was audibly appreciated, a small gift of tobacco crowning

what was to these savages a rare and unique feast. The few pipes were circulated and every face radiated bliss, even the infants let go their mothers' breasts and indulged in a puff, lighting the pipe solemnly with a piece of live coal.

Then we broke camp again, and our long file marched on through the stunted forest, reaching in time the wide and open plains traversed on our way out. During the afternoon we were without water for a long time, and the march became very tiring, the heat being oppressive; women began to lag behind, and the men too became lazy.

Eventually we reached a long lagoon of muddy water. Fish were seen sunning themselves on the surface, and spear after spear whizzed out to them. Then the blacks threw down their burdens and rushed into the water like a pack of thirsty dogs. Dominik's wife was completely exhausted. The perspiration ran in broad streaks down her body, and, upon reaching the shore, she dropped her pack and, plunging into the lagoon, dived as deep as possible down to the cool bottom. She remained under water for a considerable time, only her feet being visible above the surface.

Again we went on. The sun was nearly setting when we entered the cool and shady bowers of the great bush, which still separated us from Uniya by many miles. An old disused native path wound along, and we followed it, marching at an increased pace made possible by the coolness of the bush and the waning day. The birds of the jungle were whistling in peculiar deep notes, clear and yet oddly vibrating through the peaceful thickets. The steps of kangaroos were heard rattling the fallen bamboo leaves as we marched along, a long file of silent men, worn out women and whimpering piccaninnies.

At last we reached the river bank. Uniya was exactly opposite, and two revolver shots, setting up a reverberating roar between the steep banks, soon brought a native boy over with our boat. A considerable time was spent in ferrying all hands over, and only when our collections and other traps were safely deposited in our 'museum' could Holm and I sit down to the hospitable table of the Mission, while round the fires in the bush our black friends feasted on the remains of our provisions and on the tobacco which was their pay.

CHAPTER VI

THE GREAT CORROBBORREE.

Our collecting work in the vicinity of the Mission was now resumed, but before long I made plans for another excursion. I had long wished to study the large Indian crocodile and obtain a collection of these enormous reptiles, with which, according to all reports, the lower reaches of the Daly should be swarming. Alligator Point is the name of a bend in the lower Daly, and, according to the missionaries, the crocodiles here literally cover the banks of the river. As far up stream as Uniya only one or two stray ones were to be seen, and in order to invade the real region of the large crocodile it was necessary to go down the river. Before the great corrobborree was finished, however, it would have been quite hopeless to attempt the trip, as no blacks could have been persuaded to go with us.

In the meantime we had to make the best of it, hunting and collecting in the neighbourhood of the Mission station.

The heat now began to become more noticeable. The nights, however, were very pleasant, and as long as the moon lasted I did most of my hunting after dark. Many nocturnal animals and birds began to frequent our vicinity in greater numbers than before. With the advance of the dry season the swamps and lagoons further inland had dried up, and the black and white geese drew in towards the marshy plains on the Daly in vast multitudes. Thousands of them would fly across the station and the plains at sunset, and the blacks would throw sticks and light spears at the flocks, as they scattered through the melaleuca swamps of the forest plain. All night these flights of geese would pass in all directions; sitting in our hut I could hear their call, and, grabbing my gun, I would rush out just in time to bring down a goose by the fitful light of the moon.

The dingoes used to prowl at night round the enclosure where the goats of the Mission were kept, and every now and again we could hear their wild wolf howl, a sound characteristic of night in tropical Australia. The sound is very similar to the howl of the wolf or of a dog baying at the moon.

Many illustrations of the dingo give a misleading impression of this animal. Very often it is portrayed in the shape of a fat and affable Lapland dog, whereas it really has an entirely different appearance. The body is lean and the head is thick and large, the neck being very heavy and powerful. In the shape of the body it resembles a small wolf with short and close fur, having quite a short tail with moderate hair covering. The tip of the tail is a little upturned, leaning to the right. The colour is that of a dirty brick in the male, the female being more greyish.

In Northern Australia the dingo is, as a rule, seen singly or in pairs, and the large packs, which are said to haunt the central parts of Australia, have never been observed by me. They usually spend the day asleep in the shade of an anthill or in tall grass, sundown being the signal for the dingo to begin its hunting. Its food consists as a rule of the smaller vertebrates, mice and other small rodents, their droppings generally containing the bones of these animals.

One night I heard the usual howl of a dingo from the forest behind the goat enclosure. Taking my gun, I quietly walked over to the pen, and for a long time watched intently. The perpendicular rays of the moon illuminated the open forest land and its scattered eucalypti. The low burr from 1,500 goats, chewing the cud, filled the air around me, and the distant honking of a flight of geese was borne on the breeze. Otherwise everything was perfectly still. The forest and the plains stood as if frozen in the moonlight. No dingo, however, appeared, and after a while I took a walk towards a melaleuca swamp in order at least to get a shot at a goose.

Arrived at the swamp, I took up my position in the shade of a gumtree, a little way off the dense clumps of trees surrounding the swamp. In a short while two geese

came flying over. One dropped dead to my shot; the other perched itself in a tree some distance off. Stalking it cautiously, I tried a shot at it, but, the range being too long, the goose only moved into a tree further off. I waited for some time to see if more geese would come over. Many passed, but as none of them came within range I moved on again, leaving my dead goose at the foot of a tree.

During my stalk a dingo suddenly appeared about forty or fifty yards to my left and stopped for a moment. My shot sent it kicking and "ky-yehing" to the ground. Running up quickly, I let it have the contents of my other barrel, when it gave up the ghost with a fearful howl. Having tied the hind legs of the dingo together, I slung it over the barrel of my gun and returned to fetch the dead goose I had deposited. That, however, was gone, another dingo having filched it meanwhile.

Near the station the white gumtrees were now in full bloom, and their clusters of large white blossoms gave out a lemon-like aroma which pervaded the air. Thousands of flying foxes came over at night to feast on these blossoms, and I made an easy harvest for my collection; for as they came sailing over in the moonlight they were fairly easy to shoot. Their nightly haunts were easily discovered, as their cries, which vary from the yappings of dog pups to the whistle of the oriole and the rasping screech of the cockatoo, may be heard more than half a mile off. The blacks were always pestering us to shoot these enormous bats, whose spread of wings amounts almost to a yard, and whose flesh is greatly appreciated by the natives. Having plenty of ammunition and finding it rather good shooting, we sometimes gave in to their entreaties.

During this part of the season a very thick night mist would suddenly settle on the plains by the river, disappearing about sunrise. Once or twice we were caught at night in this mist. The moonlight would only filter through it as a silvery gleam, barely sufficient to illuminate the forest for shooting purposes. We generally roamed pretty far afield, and orientation, always rather difficult in so uniform a landscape, was rendered almost impossible by the mist. One night we were completely lost. Holm

wanted to follow the vicious circle, in which a man is so easily led when he has no bearings, and had I not recognised a certain tree we should have blundered around all night without reaching the station.

In the evening I occasionally went out to shoot kangaroos, generally using my rifle, as having a longer range than the rifled gun. I quote from my notes :—

August 14–17th, 1894.

Having cleaned my rifle, I took the dinghy up the river to look for crocodiles or whatever else I might find. The sun was already low, and the river was swiftly flowing on an ebb tide towards the distant ocean. My old friend Gui, who is a very indifferent boatman, sat splashing with one oar while I was backing away with the other. We made slow headway against the heavy current, and I soon decided that we should have no chance of reaching the crocodiles I had in mind before sundown. On this account I limited my attention to the banks in our immediate vicinity, watching for the kangaroos to come out of the bush and drink at the shore.

The river was flowing swiftly between tall growths of banyans and bamboos. One side was in deep shade, long swords of sunshine piercing the openings in the dense foliage; but the other side lay in the full glare of the setting sun. The cooing of the doves and the quaint calls of the various birds of the jungle came to us from either bank as in silence we pulled upstream.

Suddenly a flock of pigeons rose noisily on the shady side, heading across the river. With a mighty rustling of wings they passed us in the shade, flashing suddenly to splendour as they emerged into the sunshine: while the noise of their flight very soon died away on the opposite side of the river. A kangaroo had stampeded them: I could hear its footfall above us behind the tall reeds. At the same moment I caught sight of another on the sunny side of the river; and then another. A moment later I saw a fourth moving in the reeds. There was a whole herd of them. The boat was propelled slowly and noiselessly across the river. One of the animals came down to the water's edge, and bending drank deeply. I wanted to bag him, and the range being now about thirty yards

I raised my rifle, but the animal hopped into the reeds and stayed there. Through an opening I sighted another ; but the boat drifted, and a branch got in the way. I then signed to Gui to shift the boat a little, but the next moment saw a third kangaroo half hidden by grass and reeds. The heavy report of the express roared between the banks, and the kangaroo dropped, rolling down the steep bank in its last throes. We took it on board and went on. Further upstream we saw a kangaroo sitting on the shore, looking suspiciously at the boat. As we approached, it ran into the reeds before I could shoot, and I could hear the dry bamboo leaves rustle as it moved along, pausing undecided now and then to listen for us.

As I drove the boat noiselessly on to the mud, I could hear the kangaroos running. Jumping quickly ashore, I pushed through the reeds just as they were on the slope of the bank between some mighty banyans. On hearing my loud whistle they stopped, and the back of one being visible at about sixty or seventy yards, I fired and brought down my quarry. Hardly had the reverberations of my shot and the stamping of the kangaroos died away in the jungle, when I was at its side. The graceful animal lay on the straw-coloured matting of dry bamboo leaves. It was a female and to my sorrow I saw that a young one was kicking in the pouch. Death must have been practically instantaneous.

Our boat floated smoothly down the golden river, hastening towards the sea under the canopy of mighty trees, which stood starkly against the evening sky. The silhouette of a long dark canoe full of blacks floated across the stream, and a flock of cockatoos screeched hoarsely, as the gold and blood of the sunset began slowly to change into the purple of the night.

August 26th, 1894.

This Sunday has been long and exceedingly hot. In the afternoon, wearied by not being able to write, smoke or read in the tremendous heat, I saddled my horse and rode out to Dingeriet. The Johnstone's crocodiles were plentiful as ever. With my first shot I had the bad luck to hit one which sank immediately and so was lost. My next was a small beggar only a little more than a yard long,

and the bullet unfortunately smashed its head completely, spoiling it as a specimen. As a reward to the young black who had followed me and very promptly retrieved the crocodile when it sank, I had to shoot a large white egret. He told me that he was too young to eat crocodile meat, and that if he did so he would surely lose his nose. Then I galloped home.

I am really longing for letters. In seven long months I have only once heard from Norway. Last time they wrote it was springtime with budding trees and birds singing. Now the aspen leaves begin to fade, and in the mellow light of the August moon the memory of fragrant spring and summer nights revives. And presently the leaves will fall, and as the frost becomes more intense and the cold, clear colours of winter shimmer under the low sun, the folk of the far north will sometimes shudder as they brood on memories of dusky summer nights. Here is no dusky summer night, nor any winter, but a burning day and a red sun that slakes itself in the far horizon like a red-hot iron plunged in water. And then swift darkness, the blackness of the pit, but for the shining stars in the far heavens. Presently the moon rises, the geese trumpet, and flying foxes, transparent against the moon, soar over like passing devils. Such is this tropical August night.

Ever since we came from Hermit Hill I had been aware that the blacks were preparing for some tribal quarrel. Representatives of the various tribes came up in troops, and the number of natives in the station was such as to cause a certain anxiety. They all went armed to the teeth with large bundles of stone-headed spears, which were generally hidden as soon as they approached the station. This circumstance, to me at least, was a sure sign that something was going to happen, for in normal times stone spears are not as a rule carried here on the river. Whether an assault on the Mission was meditated, or some internal dispute was taking place, I was unable to decide, but according to what my friends among the Hermit Hill blacks told me I was rather inclined towards the latter theory. Father McKillop was away on a trip to Fountain-head, and, believing it to be in the interests of the Mission to prevent these tribal fights, at least in the immediate

neighbourhood of the station, I told the missionaries what I had noticed and what the blacks had told me. But they only pooh-poohed the idea, and having repeated my warnings I finally held my tongue. Then one Saturday Father McKillop returned, and next day the fun began.

Father McKillop and a couple of the other missionaries had ridden over to the Chinese garden to sign a contract to buy out Ah Lin, the Chinese gardener, who that day was leaving for Port Darwin in a junk, loaded with ore from the mine. The moment they were gone the whole band of blacks took the opportunity of their absence to assemble at a not very distant lagoon, where of course they began to quarrel and fight out their various grievances. Personally I did not care to go down, having no intention of interfering in their differences.

When the missionaries returned about midday, there was only one black to be seen on the whole Mission station, one of his legs having been temporarily disabled by a spear wound. Father McKillop got into a temper and ordered the wounded man to ring the station bell, until it almost brought down the tree from which it was suspended.

After a while this brought in the school children, who were given the rough side of the priest's tongue and were refused their dinner rations. A little later a black of the Tjerait tribe came in, running for dear life and frightened out of his wits. The Mollak-Mollak tribe, the very props of the Mission, had attempted to spear the wretch, and he had escaped by the skin of his teeth. Then the best native of the Mission and the apple of McKillop's eye ran in to report in a voice shaking with excitement that he had helped to save the above-mentioned Tjerait boy, and close after him came another black of the Mollak-Mollak with a gun, who attempted, luckily in vain, to shoot him. We now made the uncomfortable discovery that Ah Lin, who had embarked in the junk, had upon his departure presented the blacks with some old blunderbusses, besides a quantity of *sam-su* or rice brandy.

This piece of intelligence at once roused all hands. The horses were saddled, revolvers were examined, and pockets were filled with ammunition. In the meantime,

however, a good many of the station natives had arrived, and these at once sent up a smoke signal to intimate to their friends on the plain that the white men were on their way.

We hurriedly mounted and rode off, seven men in all. For at least half a mile we could hear the loud wails of women and children behind us. We were determined to give the blacks a healthy fright and to get possession of the guns. Being the only one who knew the corrobborree camp, I now rode at the head of the party, and very soon sighted some natives among the trees of the plain, at whom we rode at top speed. The blacks ran for dear life, but, my horse being very fleet, I very soon caught up with them. They were a man, a couple of boys and some women and children. Touching my revolver, I shouted to the man to put his weapons down, an order with which he promptly complied. Upon my question as to the whereabouts of the man with the blunderbuss, the woman pointed one way, the boys another, and the man in a third direction.

Upon my drawing the revolver and repeating the question in a way not to be mistaken, they immediately confessed that he was in the plain by the lagoon. By this time Father McKillop and a few men had come up with us, and we decided that I, having the fastest horse, should make a detour through the forest and, rounding up the blacks, should drive them pell mell in the direction towards which Father McKillop and the others would ride. I gave my mount his head, and before long the hot air was whizzing past my ears. I have a vague recollection of riding through a maze of fallen logs, the horse jumping them one by one, never slackening his mad career until we reached the wide plain bordering on the lagoon. Here I met Dominik, who told me that the blacks had fled for the lagoon, the man with the blunderbuss among them. Presently I saw a small party of blacks running at top speed for the thickets of the swampy lagoon and Father McKillop in hot pursuit of them, the tail of his black cassock flapping in the air like a flag in a storm. I came pounding into the swamp on the edge of the jungle-covered lagoon at the moment when Father McKillop's

revolver flew out, forcing a mob of squealing women and children to stop. They stood very undecided, looking with awe, now at McKillop's small pepperbox, now at my heavy Colt, which glittered in the sunshine in a very discouraging way. We shouted to them to tell us the whereabouts of the man with the gun. The boys attempted to run away, but we warned them not to risk their lives unduly. Where, we demanded, was the fellow with that gun? They replied that he was quite close, and we told them to go ahead. We drove them splashing in front of us through the swamp, until we caught sight of a native running as hard as he could travel, an old blunderbuss in his fist. Before long we were racing alongside of him, and he stopped, his face turning an ashen grey when we covered him with our revolvers. He was obviously very loth to part with his treasure, but, faced with the inevitable, he swallowed his reluctance and handed over the gun to one of the blacks belonging to the Mission. Keeping this fellow covered, I ordered him to discharge the gun, which he did with evident satisfaction.

In the meantime the reverend father was reading the sinner and all the spectators a lesson, the points of which he emphasized with his revolver. I am rather afraid that the sum total of his eloquence was that they were all, and the fellow with the gun especially, a lot of ne'er-dowells, who had better remove themselves to their own country, and the sooner the better. Otherwise we would shoot every mother's son of them. When the missionary stopped for breath and lowered the pistol, the black began to defend himself. His excuses, however, were cut short by the threatening movements of McKillop's revolver, and the man got a further dose of scolding, until at last we got out of him a confession that the other gun was in the Chinese garden.

Leaving the awestruck sons of the forest to their own reflections, we rode straight for the Chinese garden through the open forest. When we arrived we found one of the fathers, who had settled in to look after the pigs and fowls which had been bought together with the garden. One of the blacks had the other gun, but ran off with it while we were haranguing his brother, who had also managed

to possess himself of an old disused blunderbuss. This was immediately confiscated, and on the following day the other gun was also sent in as a penance for the misdeeds of the previous day.

The only reason why the Mollak-Mollaks wanted to kill the above-mentioned Tjerait boy was that a boy in the Mollak-Mollak had died some time before. According to the native superstition a man cannot die a natural death; the fatal illness must be due to sorcery and witchcraft on the part of the neighbouring tribe, from whom a victim is at once required. So the Mollak-Mollak had got it into their heads that the Tjerait had caused the death of the boy, and for this reason a Tjerait man had to be killed.

For the moment the blacks had had a good scare, but I am inclined to believe that they were not in any way deterred from gaining their end. On the following night several things happened of which the missionaries were kept in ignorance as much as possible. I happened to lie awake for a long time that night listening to a series of blood-curdling yells issuing from the plain by the lagoon. At last I got up and stalked towards the scene. All the blacks had apparently left the station and were taking part in the play, whatever it might be, that was being enacted in the plain. Passionate howls and sounds of violence, fit to chill anybody's blood, issued out of the darkness. Before I could reach the spot everything was quiet, but as I walked through the forest I could hear rustlings and low fearful voices in the thickets and clumps around my path. They came from the women and children who lay in hiding, not daring to make the usual fires for fear of being discovered.

Some time afterwards I was told that in the vicinity of the lagoon the corpse of an old woman had been found, a scanty layer of earth and bark covering the half-putrid carcase. The Mollak-Mollak had had their revenge after all.

After these happenings, however, Holm and I appeared to have risen in the opinion of the natives. They had always regarded us as a sort of policemen, because we wore leggings, and this belief was now apparently confirmed.

On the conclusion of these comparatively mild hostilities, which only affected the tribes in the immediate neighbourhood of the Daly, the peaceful part of the meeting began. Large parties of blacks arrived from the inland tribes, partly to sing and dance, partly to obtain or exchange women, and also to perform circumcision, an operation which is always carried out by old men from a tribe other than that of the individual circumcised.

As far as I was able to see, these seasonal gatherings always begin with a large meeting in a time-honoured place of assembly, and from this meeting the various tribes, or representatives chosen from these tribes, go out and hold similar meetings with each separate tribe. I must say that I have no perfect knowledge of the cause or motives which determine the presence of each tribe at these meetings; but I have reason to believe that the main deciding factor is whether the tribe is interested in the marriage arrangements made during the meeting. Because a tribe participates in one of these meetings it by no means follows that it is present at others. It may indeed belong to another circle of meetings altogether.

The Hermit Hill and the Dilik tribes took part in the Uniya meeting because they were interested in the Mollak-Mollak marriages. But their circumcisions were performed separately, and they did not take any part in later meetings further inland towards the railway line. The Valli-Valli and the Wogait tribes, however, went there, having marriage connections with the Warai and other inland tribes. On the other hand, the Hermit Hill and Dilik tribes, later in the season, went down to large meetings with the Fitz-Maurice River tribes further south.

From this it is evident that the laws which govern the participation of the various tribes at these inter-tribal or international meetings must be highly complicated. As a rule, however, it appeared to me that the tribes living close to the place of meeting mainly met to settle their quarrels, while the more distant tribes came chiefly on marriage affairs and to perform circumcision. The large meetings or corrobborrees may thus be considered as a sort of centre for the marriage arrangements of a large district, and from this centre again the various tribes

migrate to other circles of meetings in which their interests are involved.

Strange blacks were continually arriving, even from such distant places as Port Darwin, and the sounds of song and dancing rose higher every evening from the plain by the little lagoon, where a fire burnt day and night.

Going down to the meeting one evening, I found some hundreds of natives gathered, according to the tribes they belonged to, round a number of small fires scattered about the various camps. Meeting Dominik, I asked him when the dancing was to begin. He immediately spoke a few words to a huge and venerable old greybeard, who appeared to act as a master of ceremonies. The old man shouted a few words to a cluster of grotesquely painted men who, with spears in their hands, were standing by themselves.

The fire having been replenished, the usual music began. The painted spearmen arranged themselves in double file. A few old men placed themselves in a semi-circle, appearing to take command with exclamations and mystic conjuring gestures towards various points on the ground. The two files of spearmen now began a trampling march, their track following a figure of eight. At length, approaching the semi-circle, they commenced, with one man as their leader, to execute rhythmical twists of the body, stamping on the ground, and emitting between their closed teeth the sibilant roars peculiar to the war dances of many savage races. Then suddenly the leader turned, and raising their spears aloft the dancers all ran together in a dense mob, stamping their feet twice and giving two sharp, barking yells.

All the men taking part in the dance were, according to the prevailing custom, painted from head to foot with chalk and ochre, the paint being arranged in spots, stripes and borders according to the taste and fancy of the individual. The eye sockets and the bridge of the nose had been painted with a sort of white pipe-clay, which produced a quite uncanny effect: it created exactly the same impression as if a white man were to paint the same parts black; in other words it gave the face the appearance of a dead man's skull.

One day some blacks arrived from the regions about

the railway line. As far as I could make out, they were Wolnas from the upper course of the Adelaide River. A near relative of Tommy's belonging to this tribe had died, and before his death he had made a 'mark' or message stick, which was now brought to his relative. It was a stick made from a reed, about 18 inches long, painted with red ochre, the joints being whitened. To the top was tied a bit of an old red-spotted handkerchief. As the poor fellow was unable to attend the corrobborree he had sent his relative this token as a message.

I concluded that his death would necessitate the execution of a victim somewhere in the neighbourhood, and subsequent events proved that I was right. There was nothing very remarkable in this fact, murder and bloodshed being comparatively common occurrences down here on the Daly; but, oddly enough, the victim happened to be one of Tommy's relatives in the Wolwanga tribe. I will, however, revert later on to the details of the murder of Tommy's relative.

When the singing and dancing had lasted for some time, and the old moon had been waning and the new moon had just begun to appear, the native enthusiasm for the corrobborree began to cool, and it became possible to recruit for my intended trip down the river.

An old native of the Tjerait tribe—answering to the name of Buckley, because at some remote period he had served a white man of that name—had generally acted as river pilot to the Chinese junk, knew the river very well, and generally resided at Alligator Point. He was, therefore, just the man for me, and after exploring various camps I succeeded in finding him. Being the father of one of the boys who had followed Father McKillop south, he had, as an acknowledgment of this important relationship, been made the happy owner of an old coat, a pair of trousers and an old jockey cap. The coat and the cap were generally in use, the trousers on rare occasions only. He was, of course, very anxious to go with me, but unfortunately his youngest son, having been brought to the corrobborree for circumcision, had bolted, having an excusable aversion for this uncomfortable operation. The father felt it his duty to go in search of the boy, but after

some talk I suggested to him that the boy had in all probability bolted for home, down the river, and that he would be most likely to find him by accompanying me on my trip. This argument proved conclusive, and we decided to leave on the following day.

We provisioned with rice, some tinned meat, curry, jam and a quantity of biscuits, tea and sugar, with as much ammunition as possible and a liberal supply of tobacco. For my own use I took my ball and shot gun, a double-barrelled express .400, having one barrel unrifled for shot. For Holm I got Father McKillop to lend us a Martini Henry service rifle, which proved a trusty weapon against large crocodiles.

CHAPTER VII

ALLIGATOR POINT

On the 2nd of September we fetched Buckley from his camp, and taking Tommy with us embarked in our dinghy on the ebb tide. We made fair progress downstream, and bagged a large spoonbill ibis and a kangaroo, which I shot in the reeds under the river bank.

After travelling about fifteen miles we came to a haunt of flying foxes (*Pteropus Gouldii*). Buckley's anxiety about his son was here happily ended. The prodigal was seen standing in a canoe in mid-river brandishing a long bamboo pole, with which he brought down any of the enormous bats that came within his reach. For a stretch of perhaps six hundred yards a gigantic cloud of *Pteropus* was swirling over the river, and the jungle on both sides bent and swayed under the weight of the thousands of bats which, densely packed, hung in the bamboos and trees. Their rasping calls, resembling at a distance the buzz from a gigantic beehive, could be heard half a mile away, and the southing of their wings was like the sound of a mighty storm. They literally darkened the sun, and the air was full of the sour and rancid smell of the creatures and their excrement.

They seemed unable to keep still. Portions of the enormous flock were constantly shifting from one bank of the river to the other, where, settling in the trees, they would disturb the bats already resting there, fighting for room with noisy screechings. When a gun was fired at a thickly covered tree the noise of the flying and screeching bats was so deafening that we could hardly hear our own voices.

At sundown we landed and made our camp. Everything was carried out of the boat, which we pulled as far up the bank as we could manage. It was a spring tide, and at high water an enormous bore or tidal wave would

come washing up the river. Buckley's son came paddling after us and joined our camp.

Having finished all our preparations, we sat for some time in the quiet evening listening for the coming of the bore. The waters of the river were sluggish and lifeless, although perhaps a faint outgoing current was just perceptible. Then from far away across the plains we could hear a faint murmur like the distant voice of the open beach. It was the bore. Its roar sounded more or less distant according to the bends of the river, but was continually increasing in volume until it reminded us of the booming of a mighty waterfall. After about half an hour from the time we first heard it the sound was quite close, and we could feel the earth shaking faintly under our feet. The next moment the wave rounded the point below us. It came as a gigantic wall of water two to three yards high, breaking in a white comb, stretching from bank to bank. The river filled in a flash, and the steep wall of water rolled on, sweeping fallen trees and driftwood along in its wake. The mighty roar of the wave could be heard for a long time, while the current ran very strongly up the river. The water level did not rise much after the wave had passed.

The surrounding country was plain land. The dry grass had been burnt long ago, and patches of green grass undulated almost as far as the eye could reach. Far inland we could see a forest line, and above this the steady outline of Mount Heyward was discernible in the hazy evening. Still closer to us the low obtuse cones of Mount Litchfield were visible over the wavy horizon of the bush.

We very soon had recourse to our curtains, the mosquitoes being most troublesome. No curtain, however, was proof against the myriads of those bloodthirsty devils. In millions they buzzed about our camp; the grass of the plain was full of them, and their infernal buzzing sounded like the soft note of a violin. Some of them would penetrate the netting, and there was very little sleep for us and still less for the blacks, whom I could hear swearing all night at the pests. Our own profanities were no less heartfelt; indeed, there are few torments in this world worse than mosquitoes—mosquitoes

and heat together. Just imagine the misery of it! A dark hot night, a limitless plain around you, and wherever you go there appears to be at least one mosquito to each cubic inch of air. In a moment they are at you, sucking the poor thin blood you still have left. And in all this wide plain you have a space of two cubic yards only where you may find some rest—your mosquito curtain. Even through that some of the little devils come; the remainder are humming and buzzing outside, keeping you from sleep, and at your camp fire the blacks are raving deliriously, fighting the pest with smoke and beating them off with dried goose wings.

When day broke we had not had much sleep. During the morning we dozed while waiting for the ebb tide, which would take us down the river. In the forenoon a native of the Wogait tribe named Matchi joined us, bringing his three wives and two or three dogs. He was a great friend of Buckley's, and was lent the canoe in order to take the river in our wake. Finally the ebb tide set in and we embarked.

Plenty of birds and water-fowl appeared. The banks now became perceptibly lower, and the river wound along in great serpentines, passing now through enormous jungles, now through open country. I shot a few duck, and a kangaroo appearing in the reeds dropped to Holm's gun. The heat was terrific as we pulled down the river, Matchi and Buckley's son poling the heavily laden canoe behind us.

For about twenty miles we saw practically no crocodiles, but then they began to appear in numbers. Here and there they became visible on the mud-banks, sliding into the river as we approached. Even on the top of the river bank and in the jungles they were to be seen sunning themselves. As we were passing a bamboo jungle I heard a rustle behind us, and turning round I saw a large crocodile, at least fifteen feet long, come slipping out of the jungle and sliding down the bank.

Just for a moment it stopped on the mud, shining in beautiful black and greenish yellow colours. I took a snap shot, but missed by a fraction, the bullet plopping into the mud just over its back. With one stroke of its mighty tail the enormous reptile sprang into the river. The water

was shallow, and the air bubbles from the swimming crocodile came to the surface in a long line with a peculiar sharp spatter. So great indeed was the speed of the reptile in the water that a thrown spear could scarcely have travelled faster.

A little later we saw two crocodiles resting on the mud under the bank, some distance below us. Leaving the boat behind, I walked through the grass until I was level with them. Then I stalked quietly towards the bank, and, peering carefully over the edge, I saw a seven to eight foot crocodile lying broadside on about fifteen yards away. Raising the rifle very cautiously, I sent a bullet through its spine.

My men now arriving with the boat, we took the reptile on board and pulled further down the river, while other crocodiles shot into the water all around us.

Buckley's old camp site at the edge of an enormous plain was now chosen for our camp, and Matchi and his family also settled in close to us. Having arranged the camp, the tea-bucket was put over the fire and, the water soon boiling, tea was made and was sweetened with sugar. The first mouthful was an unpleasant reminder that we had overlooked an important fact: the water was quite brackish, and the combination of salt and sugar was more than we white people could stand. The blacks, however, finished off the tea with evident pleasure.

When we asked Buckley if good water was to be had, he pointed far away across the plain, and starting off with Matchi, carrying all the water-bags and tin cans available; he returned in an hour with sweet and clean water. This trip for water had to be made every day, for sweet water is necessary to us white people, although the blacks did not mind drinking the water of the river.

On our side of the river the plain was practically devoid of trees, and in order to obtain some protection from the sun we decided to build a bower. Accordingly before dark I sent Buckley across the river, where dense and leafy shrubs were growing. He cut a great boatload of leafy saplings and also brought a good supply of driftwood. Very soon we had made a fine leafy bower and, keeping up a brisk fire in front of our modest abode, we

spent a pleasant evening, thanking the Powers for the absence of mosquitoes, and, later, reclining on the earth, slept a sleep of incomparable sweetness.

The following day Holm was exceedingly keen to have a shot at the crocodiles, and I remained in the camp. After putting the finishing touches to our bower and tidying up the camp, I began to skin the crocodile shot the day before. Holm remained away for a long time, an intermittent fusilade of rifle and revolver shots advertising his various engagements with the Leviathans. Late in the afternoon he arrived with a twelve-foot mugger, which the united efforts of all the men and women in our camp were barely sufficient to drag up the bank from the boat.

Holm subsequently wrote in my journal an account of his day's adventures, and his description of them is so quaint and amusing that I reproduce it here :—

Alligator Point, 4 September, 1894.

“In the morning the members of the expedition felt exceedingly well, owing to the good sleep they had last night and to the prospect of bagging some of the large crocodiles which abounded in the river near by. It was agreed that Holm should try his luck.

“A crocodile came swimming across the river and crawled on to the shore about four hundred yards below the camp. Holm took his long Martini, lent him by the Daly missionaries, and went slowly down stream. As he approached the crocodile, however, she went into the water again. The probability of becoming her owner had apparently passed ; but as her head remained above the water, Holm could not resist the temptation and let a bullet rip. It hit her all right, as we could hear the thud. But that was all. She made a tremendous splash, and—was gone !

“The river had now gone down and the mud banks were visible. Holm then took old Buckley and the boat and went down stream. The course of the river being unknown to them, they came all too suddenly to a bank entirely covered with crocodiles, which at once rushed into the water. Holm got quite frightened when crocodiles poked their ugly heads out of the water here and there quite close to the boat.

“Presently they sighted another bank, where two crocodiles were sunning themselves. Holm and old Buckley now held a council to discuss how to get within range. But, in spite of the council, they had no luck at all. A third sandbank was now sighted, and the probability of getting a crocodile in course of time increased. They pulled the boat ashore and began to walk slowly along the bank. As they drew near to the sandbank they saw two beasts about to crawl out of the water. In order to pass the time they sat down on a piece of driftwood, and old Buckley was very cross because he had forgotten his pipe as well as his matches. Holm, who some time ago had put his pipe away with the intention of giving up smoking, was annoyed by the complaints of the black. But old Buckley was quite resourceful. He cut off a plug of tobacco and stuffed it into a bamboo reed. Then he took two dry sticks and rubbed them together until he produced first a singed smell, then smoke, and finally an unquenchable fire; when the bamboo reed was smoking like a factory chimney Holm noticed a great change in old Buckley’s brown eyes.

“Meanwhile the crocodile had gone to rest, its head only showing on dry land. Holm crawled within range and fired, but the crocodile slipped into the water again. Another crocodile was sleeping some way off and Holm crawled off again to have a try at her, but he had bad luck again. . . .”

Holm continues his story in the first person: “I now pushed on down stream, but seeing nothing returned; and on reaching my starting point again I saw three large crocodiles coming out of the water. I hid behind a small bush and watched them. I was not more than twenty yards away from them, but I did not intend to shoot until they were well out of the water. I waited for about half an hour, but they showed no signs of coming further out of the water. Lying down in the mud, I took careful aim at the biggest and fired, but the bullet hit a mudbank between me and the beast’s nose. At this point I got into a temper and nearly lost heart. I began to curse my rifle, saying to myself that it must shoot low; but the worst of it all was that my blessed black came up to

me, took the rifle out of my hand and said : ' You pull it down—so.'

" Now I thought it a disgrace that a wild Australian, who had never fired a shot in his life, should presume to teach me—a hunter. It was the mudbanks that had deceived me : when I aimed they looked lower than they were, and my only consolation was that I had still to pass the great crocodile banks, previously mentioned, on my homeward journey.

" We now took to the boat again and crossing the river rowed slowly against the current. Presently we saw three of the brutes again. Before I could decide on the best way to stalk them they went into the water. We pulled on a little further. Then I saw the back of a crocodile on the other side of the mudbank. Leaving the boat, I waded knee-deep through the mud, telling the black to follow when I gave him a signal. At first it was enough to stoop when walking through the mud ; but finally I had to lie down and crawl through the mud on my stomach, and, as the distance was great, I had to progress for a long time in this way until I came within safe range. First I took a careful aim to see if my hand was quite steady, after which I remarked to myself that I should not like to change places with the crocodile. I then cocked the hammer and aimed for the left eye. At the report the crocodile lay still for a moment. She could not run, but presently she began to roll like a log ; and as I had reloaded I gave her a second shot in the head. That settled her.

" Old Buckley now arrived with the boat, raving mad because I had shot a large crocodile. How were we going to get it home ? The old man took a rope and, tying one end round her neck, fixed the other end in the boat, thinking of course that she was dead. We now tried to pull her into the water in order to tow her behind the boat. But we could not shift her. She was lying on her knotty back, all four legs in the air, and I said to the old man that we had better turn her round, in case she would slide more smoothly on her belly—which she did. For as soon as she was right side up she began to run off with the boat. I just managed to get aboard in time, got hold of the rifle and give her another bullet. That finished her off, but

we had a great job to get her into the boat ; and as the wind was against us it took us a long time to reach home.

"Dahl, who had been sitting at home listening to my shots, was vexed at our long absence, but I gloried in having shot the largest crocodile as yet in the possession of the expedition. The glory, however, did not last long, for Dahl shot one the day after which was a yard longer."

The following day it was my turn to go out, and the journal contains the following record :—

September 5th, 1894.

To-day it was my turn to try my luck, and as soon as the tide ran out Buckley and I went down the river in the dinghy. My rifle had been well cleaned with alligator fat, and I brought a store of revolver cartridges to keep offensive crocodiles away. Yesterday Holm had had to resort to his revolver, when on one occasion the crocodiles crowded too thickly round the boat.

About two miles below us there was a mudbank, just visible from the camp, and as Buckley and I quietly approached it we saw a number of crocodiles which, lying side by side, entirely covered the whole bank. When we were about one hundred and fifty yards off they began to move. Without a sound, the monsters slid over the oily mud into the water and, hissing through their nostrils, dived into the thick waters of the river.

The bank ran into a point, and, anticipating that the crocodiles on the other side of this point had not yet gone into the water, I let Buckley turn the boat, so that we drifted slowly, stern first, with the current. Turning on the thwart I took a spare cartridge in my teeth and got my rifle ready. As we passed the point an enormous crocodile, in company with several smaller ones, made for the water as fast as the soft mud would allow. The range was about a hundred yards—too far to my liking—but aiming carefully for the backbone I pulled the trigger. The brute fell as if struck by lightning, and a couple of strokes from the gigantic tail sent the mud flying in cascades on either side. But the business was done. When we arrived on the spot there were only convulsive tremors and another bullet in the eye gave the quietus.

Old Buckley began to complain, as usual, that I had

shot one of his countrymen. Such, he insisted, were the crocodiles. He had fathers, brothers and uncles among them; and now, he complained, I had shot the old man, the chief of them all, and its ghost would surely haunt us.

Looking very serious, he smacked his lips and sucked away at his stumpy clay pipe.

He was certainly right in saying that I had shot an 'old man.' The dead crocodile was quite a creditable beast, being about sixteen feet long and as thick round the body as a heifer. The Indian crocodile (*C. porosus*), has a remarkable girth. After a while Buckley plodded into the mud to see if it was properly dead, feeling it all over. It is very often quite difficult to determine whether a crocodile is really and truly dead, and the safest test is to touch its vent. If any appreciable life remains, the animal reacts in a flash. When Buckley arrived at the vent, the tail of the monster began to move ominously, and as a precaution I put a final shot through the region of the loins. Then we opened the jaws and, placing a wooden gag in the mouth for safety, cut a hole in the fork of the jaw. Through this hole we passed a rope and, making a secure hitch round the snout, towed our quarry into the water. We worked for some time, vainly attempting to pull the monster into the boat. During this work I had to keep a very sharp lookout to prevent other crocodiles from attacking Buckley, who was waist deep in the water, while I was in the stern of the boat, sweating and pulling for dear life. Suddenly the large head of a crocodile appeared on the surface only a few yards off. Quickly drawing my revolver, I snapped a shot at its head, the bullet passing a little too high. The reptile looked me unabashed in the face for some moments; then the water closed slowly over the low forehead and the green slanting eyes, a large bubble appeared on the surface, and the leviathan had gone. As a last resort we lashed the dead crocodile's head to the stern of the boat and tried to tow the beast along. The current, however, proved far too strong and landed us on the opposite shore. Here we made fast, let off a number of revolver shots and fired the grass as a signal that we needed assistance and implements to skin our quarry on the spot.

We ate a few biscuits and took a drink of water, and after some time had the satisfaction of seeing Buckley's son coming in the canoe. He brought butcher's knives and a tomahawk, and being unable to pull the monster ashore, we had to skin it in the water. With only my hat and shirt on, I had to stand thigh deep in the water and mud, slashing away as fast as possible. I did not mind if plenty of meat adhered to the skin as long as we could get our specimen light enough to warp it into the boat. The tail was the most difficult part. At every stroke of the knife the tail would make very powerful jerks, almost knocking us down. Finally I had to stand on it. But now and again strong reflex movements would set in, and the tail would give a mighty stroke and send me flying.

At last we managed to get the body clear of the skin and rolled the latter into the boat. When we reached the camp, all hands had to join in carrying the mighty skin up the steep bank.

Holm had the doubtful pleasure of sitting all day skinning crocodile in the sunshine, listening to the distant shots and watching the brown kites (*Milvus affinis*) as they stooped for the bits of crocodile meat which were scattered near the camp. These kites were always in evidence, generally in large numbers. For our amusement we often flung bits of meat at them, and the circling birds would swoop down and catch them almost before they fell to the ground. They gave us the impression of being a kind of poultry round our temporary home in that desolate plain.

The black crows (*Corvus coronoides*) were also constant visitors, keeping, however, a respectful distance as long as the camp was inhabited, but the moment they saw it had been abandoned they came to investigate.

The mosquitoes troubled us greatly in this camp. I have rarely seen a native so kind and conscientious as old Buckley. He hardly closed an eye the whole night. I might wake up at midnight and see his black silhouette against the dusky heaven. I would ask him why he was not asleep. "Me looking out boat," he would say. With a broken goose wing, such as the natives use for this

purpose, he sat fanning the mosquitoes away from his person. Every now and again he would break into a torrent of rusty English : " Kot dem you bleedy missekito, vat for you kem here."

Then we would begin to talk, and Buckley would give me his theory on the presence of the mosquitoes in more or less the following words : " The spirits of the crocodiles are offended, you see. You have shot small crocodiles. Holm has shot a grown up crocodile. No matter. But you have shot the old man crocodile, my brother, and he now takes his revenge. He has told the mosquitoes that five men are sitting in Buckley's camp, who all the time shoot the old men among the crocodiles."

And Buckley stoops low. " You hear im, Hissss," and the native angrily imitates the incessant buzz of the mosquitoes. Then he will suddenly rise, and, addressing the space of the river in angry and irritable words in his own tongue, he endeavours to conjure the spirits of the crocodiles. After some time he proposes that we shift our camp in order to let the crocodiles come and cry over the remains of their dead fellows. Then, and only then, the mosquitoes will leave us alone.

At daybreak I may wake up and see Buckley's outline against the pale morning sky. He sits at the fire warming himself and looking far into the plain. " Why don't you sleep, Buckley ? " " Me look out black fellow," he answers. He is on the look-out for possible hostilities.

A queer native this Buckley. One night I noticed that his arms and thighs were covered with a number of irregular scars, quite different from the customary tattoo marks. Asking him how he had come by these scars, I got the plain and pathetic answer that a little daughter of his had once died, and, grieving at the loss, he had torn himself to pieces.

Tommy, who was now in a perfectly alien territory, lived in constant fear of contracting 'matoma,' a kind of wasting or consumptive disease, supposed to be caused by evil spirits. The risk of contracting the disease is supposed to be highly increased when living in a strange land. He dared not walk on the river mud and avoided

eating fish or snake-necked cormorants. The nests of the latter bird overhung the river in great numbers a little below our camp, where a few trees adorned the bank, and Matchi and Buckley's son used to ascend these trees at night, killing the fat young birds with sticks.

On the 6th of September Holm went out again, returning towards the middle of the day with a large crocodile. He had stalked it while it lay asleep under the river bank, killing it with a shot through the head, fired at a distance of a few yards.

We had now almost as many crocodile skins as the boat could conveniently carry, but the specimens being far from dry we had to wait, in spite of our store of provisions running low. A couple of pounds of rice were saved for the return trip, and what was left would not suffice for even a couple of meals. Crocodile meat we had in abundance and the blacks had eaten their fill of it, but we whites could not accustom ourselves to the oily meat and had to provide something better for our fare. Some of the kites which constantly soared over the camp were brought down, and we made a kind of fricassée of them. But they proved as tough as india-rubber, and something better had to be shot.

On the 7th of September I took Buckley along, pulling up the river, partly to get another crocodile, partly to look for some edible game. We immediately crossed the stream and proceeded under the opposite bank. A little further up a mudbank surrounded a small promontory, and, suspecting the presence of crocodiles, I stepped ashore, leaving Buckley and the boat behind. A middle-sized mugger was found sleeping beyond the point, and, crawling along in weeds and mud, I finally fired at about 75 yards. The monster collapsed with the shot; but while reloading I saw it give one convulsive flick of its tail which sent it sliding into deep water, where it immediately sank out of sight.

Still another leviathan was visible a few hundred yards further up the river. After a successful stalk I fired, hitting it, however, too far back. With astonishing swiftness and energy the beast flung itself several yards through the air and, curving its tail upwards after the fashion of

certain lizards, rushed through the shallow water, its plated body disappearing instantly in the muddy stream with the speed of a torpedo.

Far up the river I saw still another crocodile slide off the bank, swim some distance and finally land again further up, under a prominent clay bank. Running swiftly, I reached the point by a small detour, and, peering cautiously over the bank, immediately observed the wedge-shaped head of Leviathan just below my feet. He had taken the precaution not to land and was now swimming away, half turning his stiff head and giving me a surprised look. When in the water the crocodile appears to be entirely without fear. Unfortunately, to fire at a mugger in the water means wasting ammunition without getting the trophy.

Buckley soon reached me, very downhearted at my bad luck. Having vainly tried to stalk several crocodiles and having shot a couple of *plotus* for food, we finally observed a large and thick crocodile reposing with the front part of its body on the shore, just under the steep and straight river bank. We landed, and having secured the boat, proceeded up the river some distance away from the bank, until we judged ourselves to be level with the crocodile. Having crawled very quietly to the brink of the bank, I peeped carefully through the grass, immediately perceiving the rugged torso of the crocodile head on, a few yards below me. However, as soon as I poked the rifle barrel through the grass, the crocodile must have discovered me, and, becoming suspicious, began slowly to back out. A shot, under the circumstances, would have been wasted, as one stroke of the tail would have sent the dying animal into the stream, never to be retrieved.

The water finally closed over the head of the cunning monster, and I was just on the point of rising, when, by accident, I looked a little to the right. A six-foot crocodile was lying on the slope of the bank so close to me that for a moment I really doubted if I could get the rifle between us. The distance, however, proved sufficient, and working very slowly I succeeded in aligning the rifle. The bullet passed clean through its head, and jumping down I grabbed the crocodile by the tail and swung it

on to the bank, Buckley loudly applauding the quick work.

Passing down the river, we saw several crocodiles, but a stalk only ended in my attempting to shoot one in shallow water, which however escaped. A small flock of spoonbill ibis were observed on the mud. I stalked them, crawling through the grass, and firing brought down four of the palatable birds, returning shortly to camp in order to cook them for dinner. After this we stopped shooting crocodiles. Our time was fully occupied in looking after the skins, which were now drying around our camp. Maggots had to be picked off, fat had to be removed and preservatives to be rubbed in. Besides, the heat was also too oppressive for us to do much. Now and then, however, we had to go out and shoot something to eat. A quart of rice and a couple of sweet potatoes were all the food we had left for the three days we had to stay before the skins were dry enough to be packed.

We thus had to procure our food wherever we could get it, and we regretted that we had brought no fishing gear. The river swarmed with fish. Large shoals of mullet played on the surface, close to the shore, and the stomachs of the crocodiles contained nothing but the bones and vertebræ of fishes. Fish is the normal food of *Crocodilus porosus*. This gigantic reptile, which in extreme cases may reach a length of about 28 feet, has probably the widest distribution of all crocodiles. It ranges from the Persian Gulf to Korea along most rivers and coasts in this part of Asia, and occurs all over the Malayan Archipelago. It is also found at New Guinea, Northern Australia and in the Pacific as far as Fiji. It lives in salt as well as in fresh water. Very far up in the Australian rivers it is never numerous, simply because there is too little food for it. In the sea, too, crocodiles seem to occur but sparsely. Their real territory seems to be the river mouths and the lower brackish reaches, which are largely influenced by the tides. On dry land, I think, this crocodile must be considered perfectly harmless. In spite of its enormous strength and its almost incredible swiftness, I have never heard of it attacking man on dry land. It always runs away, and in obvious panic, at the

presence of man. But in the water they are entirely devoid of fear, and one is well advised to keep a keen look-out for them.

According to Buckley, the crocodiles were now very soon going to lay their eggs—as soon as the first showers of rain should come, he said. Judging from tracks on the river banks, the reptiles were at present seized with the unrest which precedes the egg-laying. In this condition the animals begin to roam about at a greater distance from water than usual. They often appear to frequent the jungles, looking for sandy patches suitable for depositing the eggs. Following such tracks, I was always led to old crocodiles' nests, *i.e.*, small scattered hillocks of sand, where old eggshells were plentiful. The pairing-season at all events appeared to be in full swing, the large reptiles being frequently seen chasing each other in the shallow water, playfully nipping at one another and striking with their enormous tails.

The district being comparatively poor in birds, the gun did not bring sufficient game to our pot, and on the 9th, when we began to starve, Buckley and Tommy for once went out to forage. The old man told me that he knew of a lagoon swarming with the long-necked turtle (*Chelodina oblonga*). In the river Daly itself this turtle is not to be found, but all lagoons and melaleuca swamps in the low country were full of them; that is to say where the blacks had not hunted them too heavily. They are very easy to catch. Wading in the shallow lagoons, the native generally feels them with his feet, and stooping down catches them with his hands, the only instrument. I have seen the blacks employ for catching turtles. Even the eggs, which are laid in great clusters on the shore, are eagerly sought for.

After some hours the two blacks returned, loaded with spoils. Buckley was entirely covered with dead and dangling turtles, and his spirits were as glowing as his own fat and sweat-dripping person. This night we feasted on turtles, roasted on the coals, and a real delicacy they were.

On the 10th we prepared to depart. Matchi left us, disappearing in the endless plains with his wives and

dogs. He was one of the best natives I met. He belonged to the Wogait tribe. As previously mentioned, this tribe inhabits a very extensive coast area reaching from the mouth of the Daly almost to Port Darwin. This tribe undertakes long migrations, at least so far as the southernmost families are concerned. The object of these migrations is partly to reach Port Darwin, where tobacco may be obtained, and partly to hold corrobborree with inland tribes far inland. The Wogaits get some of their wives from a small tribe, the Warai, which inhabits the lands between Mount Shoebridge and the Central Tableland.

We folded and packed all our crocodile skins. In the bows we stored our bedding, and all the other gear, which would take no harm from a wetting, was crammed into Buckley's long canoe. In the afternoon the ebb tide was slackening, and the current was not stronger than we could easily pull against. Thus we left, Holm, Tommy and I occupying the dinghy, and Buckley and his son poleing the canoe. It was weary work, but we rubbed along. An enormous crocodile, which I had often vainly attempted to stalk, shot out from its point and disappeared, its 'blowing' in the water giving us a last greeting from this reptilian Eldorado.

A few sheldrakes (*Tadorna radja*), of which some passed us now and again, fell to my gun, and as we had saved about two pounds of rice we should not have to starve. Dusk began to fall. We came into a region where the river ran narrow between steep and tall banks, covered with groves of melaleuca and casuarina trees, a gloomy and dismal landscape. Suddenly the hoarse voice of a native hailed us from the southern shore, re-echoing between the banks and forest glades. Buckley answered. A short and loud conversation followed, the old man finally paddling his canoe across the river. He returned with five natives, his brother and some other blacks, who were now returning from the corrobborree and who were wildly excited on account of a crocodile having killed a native girl at a camp, 'Pondera Jingo,' some distance below Uniya. She had for some time attended the Mission school, but had recently returned to her parents

in the bush. The previous day she had paddled under a steep bank of the river, looking for freshwater mussels. Two crocodiles, sunning themselves on the top of the bank, had been frightened, and jumping straight into the river, had capsized the canoe, at the same time pulling the girl down. Again, as on previous occasions, I had to marvel at the incredible swiftness with which news travels from man to man in these sparsely inhabited parts.

We went ashore at an old native camping site in order to feed, and also to wait for the flood tide and the rise of the moon. Buckley's brother brought a large basket of cooked fruit of the blue water-lily. This excellent vegetable was attacked while our rice was boiling in the pot. The sheldrakes were plucked and, after cleaning and splitting them, we skewered and grilled them on the coals, a method of cooking which cannot be improved on in such circumstances. Having all eaten in good fellowship, the pipes were lit, and our adventures had to be told to our new friends, who were greatly impressed by the sight of the large crocodile skins in the boat.

Kangaroos were heard trampling around our temporary camp, but it was impossible to see them now before the moon should rise. Moreover, we did not greatly bother about them as our stomachs were full. A couple of hours earlier we should have done all we could to get one.

A whitish light appeared between the trees, low in the eastern horizon. Then the disc of the moon rose slowly. Its pale rays filtered through the forest, where the light of our fire flickered over the giant trees on the banks. The tide set in, the river rose, and on the ingoing current we again embarked. A few last parting words were heard from the blacks as we paddled off, assisted by the strong tidal current.

Hour after hour we pulled along, all through the night. The moon sailed serenely across the heavens, our boat cut smoothly through still and inky pools, where giant fish were rising, and from the forest and the jungles issued all the sounds and noises of the night. The moon hung very low in the west and a rosy eastern glow

announced the coming day, when we approached the Uniya Mission station. The blacks were ashen grey with exhaustion, and our legs were tottering, as we finally scrambled up the bank. And at that moment the sun rose large and round, plainly visible between the stems of the sparse forest.

CHAPTER VIII

LAGOONS AND SWAMPS

We recommenced our collecting work about the station, giving our attention mainly to the birds. As the blacks now only rarely brought me anything new for my collection, the continuous preservation of smaller mammals and reptiles brought in by them no longer impeded us, and I could devote all my time to the pursuit of birds, which only the gun could bring us.

The heat now became anything but pleasant. For more than a fortnight we had more than 110° Fahrenheit in the shade and the temperature at night did not drop appreciably. The air was very sultry and oppressive, being full of moisture from the evaporating lagoons in the vicinity. The nights were hot and close, and insects and mosquitoes by the million drove one under the mosquito curtain soon after dark. Sleepless and perspiring, one would spend the night in hunting with a candle those mosquitoes and sandflies which, in spite of all precautions, would find their way through the nets. The closeness of the atmosphere would increase day by day, until gigantic clouds came rolling up over the horizon and, blackening the skies, burst in a deluge, lasting only about half an hour, but nevertheless purifying the air and reducing the high temperature. Such showers were, however, exceptions. The dry weather continued and for weeks the whitish sky was unbroken by any cloud, and the south-east monsoon, which had generally swept cooling over the enormous wilderness, now ceased. We were in the quiet period, before the arrival of the north-west monsoon, which should bring rain to the thirsty land. Only now and then small and violent whirlwinds would sweep the plains and raise enormous columns of dust and ashes hundreds of feet into the air. These whirlwinds are quite local, but exceedingly violent, disappearing as quickly as they come. On a

perfectly calm day one may suddenly be surprised at seeing dust, grass and twigs whirl around only a few feet away, while the surrounding air is perfectly still. This whirl will become more and more rapid and the débris will gyrate higher and higher with a peculiar hissing sound. This whirling column will move straight towards one, and for a moment one feels its violent circular pressure. Then it passes and the whirl on the ground ceases momentarily. But in the air the column goes on, ever ascending. Then of a sudden it will become still, and grass, leaves and twigs will descend slowly, perhaps several hundred yards away from where they were originally caught up in the whirl. One day I saw one of these whirlwinds hit the corner of a large shed on the station and fling spars and sheet iron plates about in a way which clearly indicated the power of the wind. The straw from the roof of the shed was carried up so high as to be almost out of sight.

The tremendous heat would have induced anyone to be lazy, and in addition Holm had to contend with attacks of fever. He also suffered from some stomach troubles, contracted probably through his sedentary occupation. But, notwithstanding these drawbacks, we worked with considerable energy and our collections now accumulated faster than ever.

Our work had become quite mechanical. In the morning Holm began the preservation of specimens left over from the day before. I went out with the gun, returning in the forenoon with the bag, wrote my journal and assisted Holm in skinning. After a midday meal and a rest I was off again, returning well loaded with spoils some time before sundown. Very often we would then continue skinning at night by the light of a candle in our small 'museum,' that is to say if the mosquitoes were not too troublesome.

The lagoons were now my best hunting grounds, and among them was a lagoon which the natives named 'Benderang.' It ran inland from Dingeriet, which I have previously mentioned, and was surrounded by tall reeds and a dense vegetation of trees and jungle growth. This considerable expanse of water was nowhere deeper than would permit a man to wade everywhere and still keep

gun and ammunition above the water. Every day for almost a month I rode out to this lagoon, accompanied by Tommy, whose duty it was to carry the specimens I shot, which very often were large. The game was disposed in bundles over the saddle and the smaller birds were generally carried in a large fishing creel. I generally tethered our horses in a grove and then waded through the lagoon, firing away at the birds, Tommy following in my wake, retrieving the game as it fell. This collecting became a kind of routine work and I gradually acquired considerable skill in bringing down the greatest possible number of birds in as few shots as possible.

The birds were far more wild than one would expect from the virgin character of the ground. But the natives have for ages hunted them to a certain extent, teaching them to fear man, and the shooting was by no means mere murder. As a rule I had to shoot them on the wing ; but the number of birds was so enormous that flocks of birds were passing or coming over within range every few minutes. After a couple of hours' shooting the number of birds killed would generally exceed the number of cartridges spent. We sprinkled all the birds with sand or dry earth to stop the bleeding, found our horses and, having mounted, galloped home over the plains.

While the water level of the lagoon was still comparatively high the shooting yielded less and proved considerably more toilsome, owing to all the wading we had to do. To wade for hours up to the waist in water and then to let the clothes dry on one's body twice a day becomes very tiresome and uncomfortable, especially if it has to be done for weeks at a stretch. However, as the dry season advanced the water would evaporate with surprising rapidity, dwindling to pools and scattered ponds, often of considerable area. These shallow ponds became the last resort of innumerable little fish and other lesser life, which serve the water-fowl as food. Sometimes I have seen the water in these small evaporating ponds so full of small fish that there appeared to be as many fish as water. The fish were sometimes so densely packed that they seemed to touch one another, and the blacks would bail up great quantities with baskets or even

with their cupped hands. Water-fowl of every description now arrived in real earnest, mainly in order to feast on this wealth of organisms which in the shallow water was so easily accessible.

The puddles and the humid stretches of mud in the bed of Benderang were now literally covered by myriads of water-fowl in enormous variety. Flocks of white egrets, ibis and spoonbill ibis gave the lagoon the appearance of a snowfield. Ducks and geese were swarming among screaming terns and diving cormorants. The beautiful little *Parra gallinacea* would trip about on the floating water weeds, and hundreds of the gorgeous blue water-hen (*Porphyrio melanotus*) surrounded the grassy shores of the lagoon, hiding in the thickets and rushes on our approach. The mudbanks swarmed with members of the snipe and plover tribes, which came and went in enormous flocks, sweeping, like swarms of gigantic insects, over the still and dirty waters of the lagoon. And in the air soared dozens of the brown kite and the common *Milvus affinis*. On light, strong wings they would circle fearlessly low down above one's head, their bunched claws and yellow rapacious eyes easily visible. And when the freshness of the morning still rested on the lagoon and all this teeming life, when the dew still remained as glittering pearls on the broad leaves and large pink flowers of the lotus, when the modest convolvuli had not yet closed their violet chalices to the heat of the day, even the greatest of Philistines would have felt his dry heart beating for joy. He would thankfully have recognised that he had been permitted to witness a manifestation of nature's wealth, greater and more varied than his wildest dreams could ever have conceived.

A confused noise of varied calls and notes arose from the throats of these countless numbers of winged creatures. And when a shot was fired and the great flocks scattered in all directions an almost deafening roar of cries and beating wings followed the report.

The larger species such as herons and egrets, spoonbill ibis and ibises (the herons especially presenting a number of species) were not, however, so easy to shoot in the Benderang. But when these birds had eaten their fill

they resorted to the Dingeriet, where they completely covered the trees surrounding this lake. Also masses of cormorants were found here. The smaller birds, especially the waders, visiting Benderang were certainly to a large extent non-migratory Australian birds. But with the advancing season there arrived daily numbers of birds which presumably were only visitors or migrants on their way to this coast. At all events, there were among them species of *Aegialitis*, *Totanus*, *Tringa* and *Charadrius*, sometimes in enormous numbers, which in all probability had their home in far northern regions. Whether Northern Australia is a winter resort for certain birds of Eastern Asia, just as the interior of Africa is a resort for European species, I should not like to say. This much is, however, certain—that in Northern Australia species are met with which inhabit Siberia.

When going to Dingeriet to shoot large waders I generally took a native and, employing him as a beater, sat down in a convenient spot. The birds were repeatedly driven over me and I would fire with almost invariable success, until the weight of our bag forced us to return to the station.

Prodigious flocks of cormorants haunted the shores of Dingeriet, and especially the long puddles towards Benderang. The large and the small cormorant, *Graculus novae hollandiae* and *Graculus stictocephalus*, here covered the shores of the narrow lagoon or literally filled the trees which rose among the tall grass and reeds on the shores. Across a narrow part of this lagoon lay a fallen tree, and when once, in the company of Pono, a Hermit Hill native, I came sneaking through the grass, I saw that this tree was full of cormorants, the metallic lustre of their black coats resplendent in the sunshine. We stalked them very carefully, advancing through the tall grass on top of the bank. About twenty yards away from the birds I prepared to fire at one of them, when unexpectedly they began to plump into the water. Advancing a few steps, I got a glimpse of the opposite shore and saw at least fifty cormorants sitting densely packed on the mud. Having cocked both hammers, I rushed forth and, flushing the birds, fired a right and left. Eight were knocked

down, and shortly we had them lying in a row on the shore. After shooting some herons and nankin birds we then made for home.

The Johnstone's crocodiles in Dingeriet now commenced their preparations for laying eggs. On the sandbanks in the innermost part of the lake their fresh tracks could constantly be observed. During the day I never saw them and I am inclined to believe that these excursions preparatory to laying their eggs are mainly undertaken at night. They had been digging everywhere in the sand. But no eggs had as yet been laid, and this species, like the large *Crocodilus porosus*, appears towards the breeding season to be seized by an uneasiness, an anxiety to be fully acquainted with the localities where in time it will deposit its eggs. It was not before the end of September that the natives began to bring me crocodile eggs, which they assured me were eggs of the aridallala (*C. Johnstoni*).

On the southern side of the river, not far inland, were a couple of lakes, of which the largest was called Bakum. This lake was totally different from Benderang, Dingeriet and the other smaller and mainly temporary pools in the vicinity of the station. It was at most half a mile long and about two hundred yards broad. The whole of its low shores were entirely covered with screw-palms (*Pandanus*), their long tangled roots forming a complete network along the steep shores, while the stiff palm tops were mirrored in the water, which was still, clear and very deep. Bakum was what in Northern Australia is termed a 'lake' or a permanent 'billibong.' It was, like most deeper lakes of this type in Arnhem Land, comparatively poor in birds, excepting the few nankin birds and bitterns which resided among the screw-palms. It was, however, full of crocodiles and large fish, and everywhere on the steep shores fresh water mussels abounded, as far as I could see a species of *unio*, very similar to the European pearl mussel found in fresh water. The natives collected and ate great quantities of this mussel. Roasted on the coals and in the shell, it is very tasty, and the sharp shells are commonly employed as knives in the manufacture of arms and implements.

In this lake I found a fish somewhat surprising to

come across in fresh water. It was a ground shark or *Pristis*, occurring in considerable numbers, and being taken with spears by the natives. The species occurred also in the river and all the specimens I saw were about one yard long, the 'saw' being perhaps a foot long at most.

In the neighbourhood of Bakum and scattered among small jungles and open glades in the eucalyptus and tea tree groves were also several temporary lagoons. These were commonly bordered and overgrown by the low, broad tree which the Colonist names the 'nutmeg' tree (*Barringtonia acutangula*). The dry wood of the young trees, being very light, is commonly employed as material for the sticks used as fire-drills. The method of fire-drilling was very similar to that employed by the Zulus. The sticks were generally of the thickness of a very light walking stick and about two feet long. One stick is employed as a drill, the other is provided with one or more pits or depressions into which the rounded end of the drill fits. A slit is cut from the side of the stick into the pits. In drilling for fire the pitted stick is placed on a stiff piece of bark or on a small flat stone, the operator keeping it firmly in position with his foot. Inserting the drill perpendicularly into the pit, he now twirls the drill between his palms, exerting a downward pressure. By repeated twirling a hot wood-powder is ground out from the pit, oozing through the slit in the side of the pit and gradually forming a small heap on the flat stone. By incessant twirling the powder issues in a red-hot condition, finally bursting into a tiny spark, which gradually sets the whole heap of wood powder aglow. Fine fuels are now carefully heaped round this glow, and by careful blowing or by the gentle fanning of the breeze they finally burst into living flame. The initial drilling is very often assisted by a little sand, and occasionally the driller rubs the drill point on his nose. Generally a clever driller produced fire in a few minutes, but under unfavourable circumstances a clumsy man was apt to bungle, and the natives only employed this instrument when, on rare occasions, the perpetual fire in the care of the women had accidentally gone out.

Around the shallow, sunny lagoons there were small forest glades of incomparable beauty, and under bushes small parties of natives were everywhere camped, lazing in the cool shade. These were natives who did no work on the station. And why should they work? Half an hour's walking through the bush or diving in the lagoons enabled the women to procure baskets of yams or nymphaea fruit. A few thrusts with a fish spear or some lucky grabs with their hands brought the men enough fish or turtles for the day. And then they would lie or sit in the shade, naked and happy, while the fresh fish curled on the white ashes of the fire and the women dug burrows in the ground to cook the yams.

These camps were mainly inhabited by Hermit Hill blacks. A few did a little work on the station, earning some tobacco, which at night was shared by the whole tribe. Doubtless this was one of the reasons why they lingered here on the borders of the Daly. This tribe and the Dilik had also some time ago held a corrobborree, where two boys had been circumcised. It is well known that most Australian tribes practise circumcision, and in the tribes which I met in the northern parts of the Continent it was almost invariably practised. Only a couple of tribes in the extreme north around the Adelaide River, the Mary and Alligator Rivers, omitted to circumcise their boys and were subject to general contempt. The operation was—as previously mentioned—performed at the annual meetings and is generally entrusted to old men belonging to another tribe than the victim. It takes place at the age of puberty, and the fact that older and uncircumcised individuals are sometimes seen is due to the fact that these have at the last moment shirked the ordeal and taken to the bush. The operation is accompanied by certain ceremonies as to which several tales have been told. The veracity of such tales, generally told by cattlemen and bushmen to impress newcomers, must be accepted with the utmost reserve, and as I have not personally witnessed a circumcision I forbear to repeat them.

Among perfectly wild tribes the operator generally works with a sharp stone knife. Among the blacks in the vicinity of the mines and the railway, however, a

sharp splinter of bottle glass was employed, and the 'civilised' blacks about Port Darwin were said to prefer a knife, generally an old razor.

It is unnecessary to remark that an operation of this kind in a hot climate and undertaken with a septic, jagged stone implement must give rise to an inflammation, and I frequently wondered what sort of treatment the savages were able to give these wounds. Quite unexpectedly I got a solution of this question, and as I am not aware of anything similar having been previously described, I will give a short account of what I saw :

Daly River, 20th September, 1894.

. . . . "Leaving this camp we soon after found old 'Gui's' camp. The two circumcised boys were sitting here looking very downhearted. Upon examining their wounds and their treatment I found that the innermost bandage consisted of a layer of silky melaleuca bark. Then followed a small plaiting of grass and outside this again melaleuca bark. The whole was lashed with fibre thread, which also encompassed a piece of hair plaiting fixed to the hair girdle which served to fix and uphold the bandage. At my request they carefully removed the bandages, showing me the wounds, which were very much swollen and in an inflamed condition, obviously causing them great pain.

"As I sat wondering what treatment they employed for these wounds, my eyes fell on a large piece of bark which proved to cover a hole dug in the soil. This hole was about one foot wide and deep. In the sheet of bark was a hole about two inches in diameter and burnt at the edges. Upon my inquiring as to the method of using this apparatus, I was informed that it was employed for 'cooking' the wounds by means of hot stones and water. As Gui's old wife assured me that the cure was shortly to be applied, I squatted down, highly curious to see this radical treatment practised, patiently waiting for the heating of the stones, which the venerable lady had already heaped upon the fire.

"As soon as these stones were red-hot a boy brought some wet moss from the lagoon. The bark sheet was then removed from the hole, the old débris was raked out and

some wet moss* deposited in its place. Two or three red-hot stones were then thrown into the hollow and having covered these with more moss, the old dame added some water. Immediately the bark sheet was laid over, the hole in the bark sheet covering the centre of the hollow.

"From this hole now arose a column of steam. In the meantime one of the boys had removed all his bandages and, walking over to the bark sheet, laid down, passing his circumcised member through the steaming hole. He kept his arms along his thighs and his toes turned towards the axis of the body. During the 5-10 minutes during which the stones continued to emit hot vapour a convulsive shudder passed several times through the body of the boy, and the young native who superintended the 'cooking' then simply sat down on the back of the victim to hold him down."

On one of the small temporary lagoons at Bakum one day, in the company of Dominik, I had some very lucky shooting. We were walking round the lagoon to shoot geese. Here and there flocks of geese were perched in the trees or between the fallen trees on the shores of the lagoon, which presented a perfect maze of rushes and tangled vegetation. Walking along we shot a goose now and then. Finally we managed to drive a flock of twenty to thirty geese towards the end of the lagoon. We gave them time to quiet down and, making a large detour, we quietly stalked the birds, hidden behind the reeds. I had only two cartridges left, one No. 5 and one No. 8 shot, and for this reason did not expect to do much damage. Taking a careful look through the reeds, however, we saw four large geese lying close together, and immediately firing one barrel I killed them all, while with the other cartridge I got four more when the flock rose.

During this time we also paid visits to the jungles, and occasionally rode into the mountains of the Mount Heyward range. But our main work was done in the vicinity of the lagoons. Just as the lagoons and swamps were the scene of my work, so they were also my pleasure

* The plants were probably not mosses but some peculiar moss-like herbs unknown to me.

grounds. When mosquitoes and other insects pestered us in our small hut, and the forest plains were brightly illuminated by the full overhead moon of the tropics, we used to take our guns out to a swamp which Holm and I had named "the goose pond." This place was the rendezvous of enormous numbers of geese. After sundown they would arrive from all quarters, emitting their whistling and grunting calls, sounds which are inseparable from the lowland nights in Northern Australia. Ducks and solitary jabirus also paid occasional visits to the wooded swamp, and thousands of flying foxes would come flitting over the scrub. Screeching and swearing, they would settle in the tops of the white gums to eat the white orange-scented blossoms. A dingo might occasionally rush out of the grass, howling dismally in the moonlight night, and fall to one of our guns.

There was a peculiar attraction about this hunting geese at night, not so much on account of the difficult shooting, but owing to the extraordinary surroundings, so strange to the European hunter. One stands in the full tropical moonshine, either in the scanty grass on the shore or in the water, hiding in the shadow of some bush, listening to the song of the locusts, the croaking of the frogs and the suck of rising fish. Standing in the water, one is continually obliged to pick countless leeches off one's legs, and sometimes one is seized suddenly by an appalling nausea at the slimy, glistening creatures, and has to hurry ashore to scrape them away.

Above soar the nankin birds on silent wings, croaking horribly and then alighting in the trees, emitting a fowl-like cackle. A flying fox passes now and then with soughing wings, or a spoonbill ibis will float past, white as silver in the moonlit night. And the geese come, shrilly trumpeting, flying low and confident. Sometimes single birds will come, sometimes flocks forming a line or a regular snow plough outlined against the arching tree-tops of the horizon. You can hear their whistling and trumpeting approach, and whistling in answer you stand stock still. The geese soar around the lagoon, the rush of their wings sounds closer and closer; you can see the white of their wings gleam in the moonlight. They are coming on your

right now, and you must wait motionless, letting them pass behind you and hearing the rush of their wings die away, and then again approach. Suddenly they shoot past you on your left. You lift your gun slowly, the heavy report rends the air, and a goose drops with a loud splash in the water. You can see the white of its breast gleaming on the black surface of the lagoon. And while the nankin birds fly crying from reeds and tree-tops, and the 'jackass' wakes up to laugh his hard, cold laugh, you can hear the call of the geese fading away over the eucalyptus forest of the endless plain.

We had entered, as it were, a different world down here on the Daly. Except for an English teamster, who was carting some machinery which Father McKillop had bought from an old deserted mine further inland, and a couple of policemen who once visited the station on service, we had not seen a strange face since we arrived.

When previously I have described our life with the natives, I have mainly dwelt on the pleasanter aspects of that life. I have not mentioned the thieving to which we, as well as the missionaries, were subject, and I have omitted to state that questions of personal safety necessitated that neither we nor the missionaries ever took many steps away from the houses without being armed to the teeth. Nor has much been said of the numerous occasions when an armed interference on our part was necessary to decide native quarrels, which doubtless within a few minutes would have ended in bloodshed.

Our life on the station will also be but shortly touched upon. The reader may, I think, easily conceive at least the outlines of the life which a few white men have to live among hundreds of savages, a life which strongly shows up the contrasts between civilisation and barbarism. It was strange, for instance, to rise from a comparatively civilised breakfast, and then, strolling a few hundred yards away, to meet a native digging in the ground with a wooden peg and with his other hand conveying to his mouth the ground-nuts which were *his* breakfast. One could not help noticing the contrast.

Sitting on the verandah over the evening pipe, we would discuss the happenings of the civilised world, its

endless exchange of ideas, its strivings and contests. Your mind still full of this conversation, you might take a walk into the moonlit night. The wild surroundings, the wide endless forest, the black and silent river surrounded by high banks and dark threatening jungles, might not dispel your thoughts. But when this evening stroll took you into a native camp, where black and naked savages sang their monotonous corroboree before a flickering fire, you would be seized by quite a queer mixed feeling of something between envy of and compassion for the lot of the barbarian. The mind of the white man is strange and complex. However strong the instinct of evolution in him, at the bottom of every mind there is a tendency to go back, to return to that primitive condition which makes the barbarian with his life of few sorrows and of small and scanty pleasures in some ways an object for envy.

Every now and again a murder occurred. During my stay at Uniya at least four murders came to my knowledge. One old woman, who was feeble and unable to provide for herself and consequently was a burden to others, was very brutally killed. One of the other women simply cracked her skull with a solid stick. One day Dominik arrived and told me with shining eyes that a native of the Dim-Dim tribe had been killed while running away with another man's wife. A stone spear through the skull had killed him. Upon my asking when this had happened, Dominik promptly answered "yesterday." News of this kind, as I have previously said, travels with astonishing rapidity among the natives.

Many cases of murder or manslaughter are due to seductions or abductions. In spite of the imminent retaliation on the part of the offended husband, these offences are by no means uncommon. Marriages are in fact in these parts often arranged against the will of the woman, and when she meets a man she likes it does not take her long to run away with him. Her risk is, moreover, not prohibitive, her punishment generally consisting of having a spear thrust into her hind quarters when on the final settlement of the affair she tries to run away. Most of the older women on the Daly exhibited one or more old spear wounds on this prominent part of their anatomy.

I have previously mentioned that I expected the blacks of the Wolna tribe to avenge the death of my horseboy, Tommy's relative, which no doubt would be attributed to sorcery on the part of the Wolwngas. After the great corrobborree a smaller one was held at the old copper mine in Mount Heyward. In this corrobborree the Wolwngas as well as the Wolnas participated, the latter being the guests of the Wolwngas. One day my boy Tommy asked my permission to go and warn a relative of his among the Wolwngas, having heard a rumour that some Wolnas had arrived who intended to kill him. Mr. Tommy, who, by the way, had recently stolen a sweetheart, the wife of a deceased brother, obtaining his would-be mother-in-law's consent by applying a spear point to her hindquarters and vigorously, but vainly, endeavouring to crack her skull, obtained my permission to go. He returned, however, very soon, reporting that the boy had already been killed. The blacks in question had first attempted to spear an old man, who barely saved himself by swimming across the river. The rest of the camp, in great panic, made for the Mission station, except the boy referred to. He had recently been circumcised, being in consequence very ill. The murderers, returning to the camp, found the helpless boy and drove four or five stone-spears through him. Wishing to examine the corpse in order to put the police on the track of the murderers upon my return to the railway line, I rode the following day the seven miles which separated us from the mine, taking Tommy with me.

When we arrived at the mine we got one of the black loafers about the place to show us the way. He informed us, however, that the boy had been burnt, and having made a wide detour round a lagoon, we arrived through a placidly rustling casuarina forest at the old corrobborree camp. Half a mile further on our guide indicated that the place was close by. Stopping as if unwilling to go further, he pointed towards a large tree. Riding up, I found only the remains of a large fire, from the ashes of which a heap of charred and broken human bones protruded. Upon my stirring the heap, a light blue smoke shot up, and the mound of red-hot and ashen white bones collapsed at the lightest touch. Mr. Tommy mumbled

something to the effect that the old father of the boy had been too lazy to carry the corpse and subject it to the burying rites. But his face did not show the faintest trace of emotion in the presence of the remains of his near relative.

Returning through the forest, we rode our horses at the usual walk until arriving at the copper mine, where the Chinamen were about their evening meal, surrounded by a horde of hungry, lazy and very insistent blacks. The murderers had, of course, decamped in haste to their own country. In the cool evening I let my old but still fast horse have his head, covering the seven miles which separated me from Uniya at a swinging canter.

There is little more to tell of our last days on the Daly. When the white gum began shedding its bark, when the bamboo thickets became juicy green bowers, and when finally the ravages of the grass fires were being repaired by the appearance of luscious grass, I prepared to depart. Having packed my collections, I despatched them in the first available junk from the mine to Port Darwin. A few days later, on the morning of the 21st of October, I saddled my horses, and saying good-bye to the brave missionaries and my black friends, departed, amid the loud wailings of the latter, in order to pitch my camp for the rainy season somewhere closer to civilisation.

CHAPTER IX

THE RAINY SEASON

We reached Fountainhead without other mishaps than losing a horse from some stomach disease, Tommy thus having to walk, which highly displeased him.

Before taking up our quarters for the rainy season, I wished to do some collecting in the tablelands to the west of the railway, and this was easily effected by camping at Mount Shoebridge. At Fountainhead we laid in the necessary provisions, and Holm took the horses out to the old abandoned tin mine at Mount Shoebridge, about sixteen miles to the west. The old houses offered a fair shelter in the now somewhat unsettled weather. I myself went down to Palmerston to give my collections from the *Daly* a necessary overhaul after their voyage on the deck of the little Chinese junk. I also wanted to examine my bird skins for insects, and, having performed my work in the course of a few days, I immediately returned to Fountainhead and joined Holm at Mount Shoebridge.

In spite of frequent thunderstorms and violent down-pours, we could still do a lot of work, and among the broken tablelands we constantly found things which were new and interesting to us, the locality being very different from our previous surroundings on the *Daly*. Our life was very lonely, and a quarrelsome old German prospector, who joined our camp, did not contribute appreciably to the cheerfulness of the long evenings. Our blacks and the other sons of the forest, who soon appeared cadging for food and tobacco, proved quite useless for my work. On the whole the blacks who frequented the vicinity of the Chinese mines seemed absolutely demoralised, indulgence in opium and grog and all the other abominations of the Chinese camp exercising a very unhappy influence on the character of the aboriginal.

The natives seen about the mines generally wore clothes in the nature of a red or printed piece of cotton cloth, folded about the loins after the fashion of the Malay *sarong*. An old shirt was also occasionally sported, and with evident pride, by women as well as by men. But these were almost the only outward features which distinguished them from the naked and unspoilt savage. They were utterly lazy, very rarely doing fair work, and generally frequenting the vicinity of the mines only with the object of hiring out their women and daughters, in exchange for some food and tobacco, to the hordes of very low class Chinese, who did the heavy work in the mines. The consequences of this sort of life were not long in appearing, and among men and women, and even among new-born infants, one could easily trace the horrible diseases which follow the advent of the white man and still more of the Chinaman.

Tobacco, spirits and disease in a very few years had apparently reduced the natives to mere phantoms of the warlike people who inhabited the remoter parts of the continent. About these mines one could plainly note the initial stages of the inevitable ruin to which an intimate contact with white or Asiatic people appears to condemn the Australian aboriginal.

The old prospector, who camped at Mount Shoebridge partly to recover from an illness, partly to prospect for tin, had engaged a native to fetch wood and water. This boy, named 'Marmalade,' was a scamp whose society was by no means good for Tommy. The supervision of the horses was here practically a sinecure, as the banks of the creek were covered with sweet green grass, and the two blacks, who had very little to do during the day, found the nights, which they spent in the old kitchen of the mine, exceedingly boring. To counteract this they took a day off, and, returning from the Howley gold mine with a native girl apiece, immediately set up a double household in the kitchen. The girls were, however, promised to other men, and retribution very soon arrived in the shape of a mob of old women, who attempted violently to abduct the younger of the two girls. She belonged in fact to an old native of the Wogait tribe, far away on the coast.

An aunt of this girl, strangely enough a married woman, was the worst of the lot, being most vociferous in her attempts to persuade the girl, who had not the least intention of leaving her beloved Marmalade. Half an hour was spent in bad language, and then, having exhausted their vocabularies, they resorted to bodily violence. The aunt snatched up a large chunk of wood and attempted to smash the head of her niece, the men, however, preventing this wasteful proceeding. The girl immediately seized her opportunity, and grasping a stick gave her aunt a few lusty ones across the back. The fight now began in real earnest. It lasted about an hour, I should think, and was carried on with the aid of all sorts of weapons and dodges. Without the slightest doubt this fight would have ended in the death of one of the combatants if the other blacks had not interfered at critical moments. The girl fought very bravely, but in the long run she was no match for the tough old dame. Finally there was not a stitch of clothing left between them. The powers of the young girl flagged; the aunt caught her up and, flinging her over her shoulder, prepared to march off.

At this moment, however, a last paroxysm of rage seized the girl. She twisted herself free, but stumbled and fell, and the old lady, now thoroughly roused, caught up a large stone to finish the child off. Thinking it was time to interfere, I jumped down from the verandah and held the muzzle of my Colt under the nose of the old dragon. The moment she saw this the girl set up a beseeching wail: "Oh, doctor, shoot the lot of them."

The fight ended. In view of my revolver there was no more to be said. But it was a sordid business and I told the boys to drive the old women away. The aunt in question was slow in going, and gave me a bit of her tongue, so I planted the sole of my boot where her tail ought to have been, and she decamped in panic.

The next day Tommy and Marmalade had to conform to a decision arrived at according to the rules of the offended tribe. This decision, according to Tommy, consisted in allowing the male relatives of the girls to throw spears at the offenders at a comparatively short range. The ordeal appeared to have been harmless, and the boys

came through it without a scratch, both returning to camp late in the evening. They were in high spirits, bragging that the Warai blacks had not been able to hit them.

One of our first troubles arose from the fact that the creek or rivulet which passed below the houses was dry, and water for ourselves and for the horses had to be hauled up from one of the old shafts of the mine. After some showers of rain, however, the water appeared in pools in the bed of the creek, and the horses were often seen to spend the hottest part of the day almost entirely immersed in the water.

On my excursions along the creek I found several puddles where in a few days a teeming invertebrate life had developed. Particularly numerous were various smaller crustaceans, mainly *Phyllopora*, and by the aid of a small net I easily collected large numbers. The animals were exceedingly numerous, the water being almost entirely filled with them. Their abundance must have been owing to the fact that at the end of the dry season, before the creek dried up, a large number of the mature animals had finally resorted to the pool, and before dying had deposited their tough *ephippal* eggs in the bed of the creek. They proved to be new to science (*Eulimnadia Dahli*, G. O. Sars).*

The natives described to me a small mammal named 'dokoin,' said to be a bush animal resembling a small opossum, and I spent a lot of time trying to find one. On my own excursions, mainly with the object of collecting birds, I wasted a lot of time in examining hollow trees for 'dokoin,' and the expeditions I made accompanied by natives, sometimes even large parties of them, were all in vain so far as the capture of this small mammal was concerned.

Animal life was not particularly abundant about Mount Shoebridge. The large red kangaroo (*Macropus antilopinus*) lived singly or in herds among the broken hills, but they were very wild and difficult to stalk. The only edible game we shot were bandicoots, which were most numerous, generally approaching the house at dusk to

* Described by G. O. Sars, in *Archiv for Mathem.-og Naturvidensk*, 1896.

eat crumbs and other leavings from our meals, which had been thrown off the verandah. I shot them at short range with a small collecting gun, and generally had them for breakfast, for which purpose they were excellent.

Bird life was not very varied, but still the lonely mountain valleys possessed a peculiar attraction. On peaceful strolls one might here observe numbers of the small green parakeet hanging in the tree-tops above one's head. Very often they would hang head down, pretending to be the green leaves of eucalypti. Many instances of mimicry among insects also were noticeable here. Sometimes one found a grasshopper perfectly imitating the small green leaves of the bush which is its home. Sometimes a species of mantis was seen as long and thin and dry as the withered grass in which it crawled.

After tramping the whole day I found this land very peaceful and quiet when returning towards dusk over the broken hills. Sometimes I would sit down on some rock, gazing over the endless wastes around me. In every direction the eye met only forest, a blue-green forest disappearing in the hazy blue of the far horizons, and then mountains rising dim and smoky in the distance. And after sundown when a short blue-grey dusk enveloped the solitudes, the melancholy flute of the butcher bird would sound from some glen, or the faint tinkle of our horsebells would rise on the still air.

Our work at Mount Shoebridge, however, terminated before I had intended. A sudden attack of some violent gastric ailment reduced me in a very few days to a perfect skeleton, leaving me only sufficient strength to cling to my old horse long enough to reach the railway and take the down train for Palmerston. After a month in the local hospital I returned to Fountainhead, still a bit light and shaky, but in the main restored.

Upon arriving there I was offered an opportunity of accompanying a cattleman down to the Arenbarra cattle station close to the mouth of the Adelaide River. The place had been abandoned for years but was now taken up again. I thought it advisable to take the opportunity of seeing this part of the country, and Holm and I immediately returned to Mount Shoebridge. We speedily packed

our collections, re-shod our horses, and breaking camp rode for the station of Glencoe. Tommy, who up to now had been a necessary evil, got the sack.

On the following morning we rode off, three white men and three black horse-boys, with 14 horses in all, heading into the flat limitless forest which, practically without any landmark, extends to the mouth of the Adelaide River. The day was cloudy and the horses worked easily and well towards midday, when we camped at a waterhole containing some stale liquid, from which we made tea, dining on the usual salt beef and damper.

Again we rode on, passing sometimes through open plains covered with hundreds of enormous turret-like ant-hills, and sometimes through open heavy timber surrounding meadow-like glades and old dry watercourses. Occasionally we saw a few ducks in small nymphaea-covered lagoons, and now and again 'turkeys' or turkey-bustards would stride solemnly away from our advancing mob of horses. We rode and rode until the sun went down. The spires and minarets of the gigantic anthills were dyed red by the setting sun, and the long shadows would disappear far away in the endless plain. The dust, stirred up by the steps of our horses, rose golden in the rays of the low sun, which soon sank behind dark lines of paper-bark swamps in the distant west.

The moon rose, and after 14 hours' ride we finally reached the Arenbarra station about eleven o'clock in the evening. The manager, who lived here by himself among a number of blacks, immediately turned out, receiving us in the bluff and hearty manner characteristic of the Australian cattle hermit. We got something to eat, and making our simple beds on the verandah of the house soon fell into a death-like sleep. The following day, being still a convalescent after my turn in the hospital and also feeling very stiff from the long ride, I had to content myself with pottering about, shooting a few birds.

The stockman who had accompanied us continued his journey to Port Darwin with a drove of cattle, while Holm and I remained at the station, enjoying the hospitable company of the manager, Mr. F. Strong, one of the kindest and most capable bushmen it has been my luck to meet

in Australia. He certainly deserved a better fate than the lonely and tragic death which became his lot a few months later. Fever and dysentery forced him to attempt to reach the Glencoe station singlehanded. He died, however, on the way, quite alone, and as the Glencoe station was unaware of his illness, several weeks passed before he was missed. Finally his bones and accoutrements were found at a small creek a few miles from Glencoe.

The landscape along the Adelaide River was quite different from the surroundings of the lower Daly. Large open plains, dotted with occasional lagoons, stretched away in unlimited monotony, surrounding bamboo-covered creeks which were connected with the Adelaide itself. Here and there in the plains rose longish rounded ridges which, remarkably enough, were covered with timber and heavy bamboo thickets. Bird life was very similar to what I had seen on the Daly. The same multitudes of large wading and swimming birds swarmed over lagoons and creeks, and hiding in the thickets by one of the long narrow lagoons one could easily observe their habits and nature at close range.

I have a vivid recollection of arriving at one of these lagoons quite maddened by thirst. I tethered my horse, pushed through the 'nutmegs' of the shore and, parting the floating water-weeds, drank my fill from the muddy water, which under the green foliage of the weeds still had a certain coolness. In my tired and spent condition I remained for a long time contemplating the peaceful lagoon. It was probably just the virgin spot it had been thousands and thousands of years ago, and flocks of geese dotted its surface now as they had done from times immemorial.

White herons are stalking through the low rushes in shallow water, their steps jerky and undecided as is the nature of their tribe, their long necks undulating at each jerky step. Now they stop, find something, and swallowing it glance sideways at a passing duck. The overhead sun is reflected in their yellow eyes and in the light ripples set up by their steps. On the leaves of the blue water-lily and on the floating weeds, flocks of *Parra gallinacea* display their shining red combs, advancing on

enormous spidery feet, hunting for crustaceans and water insects. With careful undulating steps the birds move over the floating leaves, tails up and heads down. Sometimes two try to get on to the same leaf. A twittering quarrel ends in one of the competitors being pushed off, and with laboured flight he is obliged to seek another small floating island. And the Australian bee-eater (*Merops ornatus*), resplendent with gorgeous colours, comes sailing on rigid wings, swooping in a half-circle towards the surface of the lagoon, and, rising again, sounds his clear trilling note. The sun shines on his green and blue plumage. The grass and the scattered trees on the shore are all a-quiver under the fierce blaze of the tropical high noon.

To sit there in the sparse shadow of the trees contemplating the bird life, the long shallow lagoon and the endless plain, seemed to take one suddenly back into grey and distant ages. Time had not altered these surroundings. As they were now so had they been for countless centuries.

In the enormous plains one met a bird that really was an important feature in the landscape. This was the Australian crane (*Grus australasianus*) or 'native companion,' as it is commonly called. I had certainly observed this beautiful species on the Daly, and also shot one specimen; but I had never imagined that such flocks as I saw in these plains on the Adelaide really existed.

When riding about during the first days of my stay at Arenbarra I became aware of enormous blue-grey strips and patches in the distant horizons of the plains. At first I took these to be lagoons and waters. Approaching, however, I perceived them to be birds, the cranes which in flocks of hundreds covered the flats. They would not allow me to get nearer than about three hundred yards, but this was close enough for me to observe their queer and grotesque movements. Those birds who were not feeding occupied themselves, after the fashion of cranes, in dancing. They lifted their wings and stretching their heads forward with curved necks would jump about, indulging in the mad and burlesque steps peculiar to the crane's dance. New arrivals were constantly coming from all parts of the

plain. The air was full of them, and their clear and high-pitched trumpet-note resounded everywhere.

When they rise they follow the tactics of all long-winged birds. They spread their wings and, running swiftly forward, jump. Reaching earth again, they continue the run, jump again, and finally with slowly moving wings glide upwards at a very moderate angle. If the bird intends to go far it screws itself gradually upward in immense circles. When it wants to alight again its tactics are also interesting. It suddenly lets the legs drop, the neck is drawn back and the tail is depressed. Immediately the bird hurtles down through the air, using the half-open and, as it were, hanging wings as a brake. This terrific speed lasts until the bird is a few yards distant from the earth. Then the wings are fully spread again. Tail and neck are straightened once more, and, stretching the legs forward, the bird skims along the earth until the speed subsides. Finally it lands, jumping high in the air on the first impact, and settling with inimitable grace sounds its clear trumpet-note. As a fact these cranes fly very high, and I am certain that I have seen them drop from an altitude of six to eight hundred feet at an angle of about 45 degrees.

At first it proved hopeless to attempt to get close enough to these birds to fire at them with gun or rifle with any prospect of success. I tried in many ways. As my old saddle-horse was very fast, and observing that the cranes did not fly very swiftly and also were slow in mounting above the reach of gunshot, I determined to tackle them quite openly. I tried to ride as close as I could get and, when the birds rose, to ride for them as hard as possible and shoot them on the wing. My first attempts were entirely without success. Finally I succeeded in riding slowly and as it were carelessly up to within three hundred or four hundred yards of a small flock of cranes. The birds rising, I immediately went for them. The racing blood of my old steed was very soon boiling, and the terrific speed sent the hot air whistling about my ears. We very soon commenced to overhaul a large crane, which during the first four hundred or five hundred yards did not rise more than twenty yards from the ground. We were

steadily drawing closer. But as we approached, I could see that the bird was exerting itself to rise as high as possible. When at last, after going at a breakneck pace for about a thousand yards, I got below the crane and fired from the galloping horse, the bird had reached an altitude which rendered the shot ineffective. To kill them in this fashion thus proved impracticable. But this much I learnt at all events—that a good horse goes considerably faster than a crane flies.

At last Holm and I puzzled out a method which proved fatal to the cranes. We would ride out together and, espying a flock of cranes, we would pass it at the safe



Fig. 2.

THE ARENBARRA STATION.

distance of some six hundred yards, taking care to present the appearance of *one* rider, one man hiding behind the other all the time. In this way we proceeded until we reached some clump of tall grass, when, taking both guns, I would slide off my horse and hide in the grass. Holm would go on, and, leading my horse and making a wide detour round the birds, would begin to drive them towards my hiding place. He would then ride in a long zig-zag, advancing very slowly and taking the utmost care not to approach the birds closer than three or four hundred yards. The cranes would then not rise, but would only

stride slowly away from him. In this way they could be driven, but only with infinite care and caution. The drive was very slow, but absolutely sure, and within half an hour's time the heavy birds would march solemnly past my hiding-place. A well directed right and left would, in lucky cases, drop a brace of the grand birds in the short green grass of the plain, after which the rest of the flock would flee and Holm come galloping up, a happy grin on his sunburnt face.

I also made long excursions into the vast plains, attempting to get a buffalo. But, notwithstanding all our efforts, we found nothing but tracks. The reader will be surprised at hearing the buffalo mentioned as a denizen of the forests of Northern Australia, but nevertheless its presence is a fact. Long ago, before the days of Port Darwin, the telegraph and the railway, a convict settlement was established on Melville Island. The extremely savage disposition of the natives of this island necessitated the transfer of the colony to Port Essington on the mainland. In both these places the colony had kept Indian buffaloes (*Bos buffelus*). On the subsequent abandonment of this colony the buffaloes had been left behind and had multiplied to such a degree that parts of Arnhem Land swarmed with them. They were distributed from towards the mouth of the Victoria River to the Gulf of Carpentaria. In certain places, as at the mouth of the Adelaide and the South and East Alligator Rivers, they were so numerous that a few men were exclusively occupied in hunting them for their hides and horns. They had made and were still making good money on this hunting, which was done partly on foot and partly on horseback. The hides would fetch about a sovereign apiece, and when a couple of hunters could not get a thousand buffaloes in the season they were said to be discontented. The hunting was possible only in the dry season, and the best hunters were said to have got upwards of forty animals in a day, employing numbers of blacks as assistants in the skinning and carrying of the hides. This prolific occurrence of the buffalo was restricted to the coast-lands of the extreme north, but wherever I have gone in Arnhem Land I have occasionally seen the tracks of these huge animals, which

were easily distinguishable from the ordinary cattle tracks. On the Daly they were fairly common, but I never saw the buffaloes themselves.

The soil of Australia appears to be favourable for the well-being of certain South Asiatic animals, and as another instance I may mention that a herd of brahma cattle (small zebu) had once been introduced in the vicinity of Port Darwin. They were now running wild and were said to occur in large numbers on the western side at the mouth of the Adelaide River. Chinese pigs also ran wild,



Fig. 3.

PLAIN AT ARENBARRA.

had spread over the vicinity of the Adelaide River, and had multiplied exceedingly. The forests were now full of them. Everywhere along creeks and rivers their tracks were visible, and the soil was largely turned over by their rooting.

The natives about the station belonged to the Wolna tribe. They were largely degenerate, exhibiting signs of unpleasant diseases, and even traces of leprosy were to be noticed among them. This disease was not uncommon

among the coast tribes and must probably be considered as introduced by the Malay trepang-fishers who annually—in the North-West Monsoon—visit these coasts and during their stay have some intercourse with the natives. Many natives also had the marks of small-pox, this disease probably being also due to the Malays.

The natives about Arenbarra frequented the vicinity of the station to obtain tobacco in return for work and to feast on the entrails and offal of the few bullocks which were occasionally killed for the meat supply of the station. For the rest they lived on what they could find in the vicinity. To a higher degree than I have observed elsewhere, they appeared here to depend on fresh water mussels, which were gathered in the lagoons of the neighbourhood. Everywhere in the surrounding jungles the dead shells of these mussels were present in enormous numbers. One could hardly take a step without crushing them.

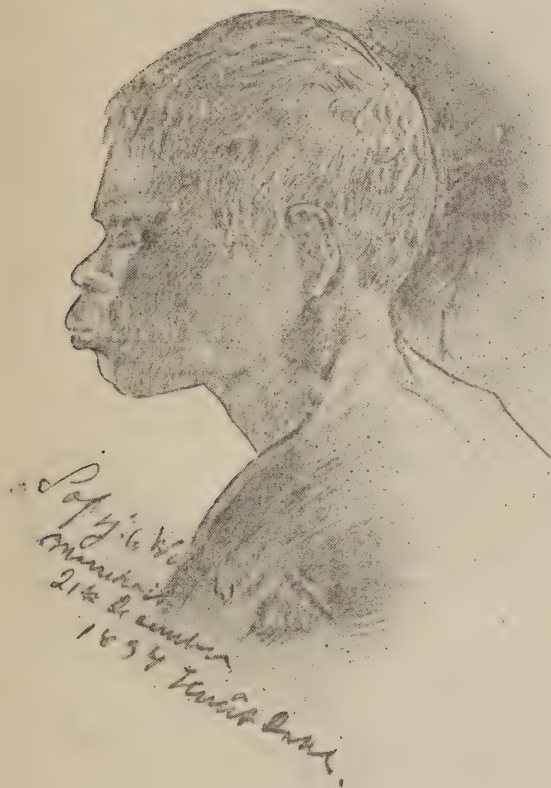
The demoralised state of the blacks aroused my hopes that among these people I should be able to obtain a collection of skulls. On the Daly I should only have got into difficulties by attempting to buy skulls and skeletons, but in this place conditions were obviously different. Upon my questioning a native he immediately declared himself ready to procure some skulls, and disappearing in the forest he shortly returned with a female skull, which one of the girls of the station declared to be that of her aunt. The price obtained and my further encouragements induced him to undertake a longer expedition to some place of burial, whence he returned with five highly interesting skulls, all belonging to deceased members of his family. For these I paid him fifty pounds of flour besides a quantity of tobacco, on which articles all the blacks of the neighbourhood held a carouse.

All the skulls obtained were obviously dug up from the earth, and the natives in this locality thus appeared to have deviated from the usual custom of burying the bones in hollow trees after the flesh has rotted away. According to their own account, the unspoilt natives of Arnhem Land always employ this latter proceeding.

The weather during our stay was very unsettled.

The heat was terrible, but the sun rarely set without rain having fallen during the day. These showers came quite suddenly. A small cloud would appear on the horizon, growing rapidly larger and larger. And almost before one had realised its threatening aspect lightning and thunder

would burst out. Then followed the rain, which was whipped along by the wind with a force that threatened to pull the house down over our heads. Then suddenly the tempest would subside. These thunderstorms lost nothing by comparison with thunderstorms I have seen in South Africa. They did not bring hail, however, and they also appeared to



shown by the tempest which in 1897, after my visit, struck Port Darwin and completely wrecked the town of Palmerston. I came to the conclusion that such violent tempests are fairly common in Arnhem Land, as during my travels I saw considerable tracts of forest which had been completely mown down by the wind. Between Glencoe and the Adelaide River, for example, I rode through a tract of forest where every single tree had been broken down by tempest. The length of the patch was certainly more than one thousand yards, the breadth of it, however, hardly exceeding two hundred yards. In several other localities I have observed similar ravages, and to my mind these observations go to prove that real cyclones are by no means uncommon in Arnhem Land. They are as a rule strictly local, and in a country of such sparse population it is a mere chance if they hit an inhabited place, or happen to be actually observed.

We spent about a fortnight on the Arenbarra and got a few things new to my collections. I had, however, by no means regained my former health, and during my absence from Mount Shoebridge Holm also had several attacks of fever. Therefore neither of us was able to work at his best. Daily showers of rain also made field work difficult.

In order not to be cut off from the outer world by the bogging of the plains during the now imminent rainy season, we had to pack our belongings, and on the day before Christmas Eve we departed from Arenbarra, steering south through the wilderness.

We secured a few black followers, partly to act as guides, partly to carry such collections as we did not venture to put on the pack-horses. The laziness of the blacks, however, greatly reduced the rate of our progress. The horses were also very slow on account of the heat; and there were other delays, as when one of the pack horses lay down and rolled, causing the saddle to shift. When it rose again some of the pack fell off, whereupon the animal went clean demented, kicked violently, and ran round, shedding the contents of the pack broadcast over the plain. It took us a considerable time to recover our various belongings.

A native dog, a mongrel of dubious origin, had conceived an unquenchable liking for my person and, in spite of very vigorous protests on my part, had persisted in following me from Arenbarra. Nothing could shake his determination, and from this moment he established himself as my constant companion, proving a very clever dog of high intelligence and a true and trusty friend. He turned out to be one of the most remarkable individuals I have ever met in a wide acquaintance of dogs. As a first item to his credit he captured on the way a large Gould's iguana, which served us for dinner during our midday rest.

In the afternoon progress was also slow, and it began to rain as we approached Margaret Creek. Holm was riding in front. Suddenly I saw him pull up his horse and signal to me. A large wild pig was slowly advancing through the grass about one hundred and fifty yards off. I could just see the back of the black boar above the grass, and slipping off the horse and steadying the rifle against a tree I killed him with a single shot through the spine. We could only manage to carry one of the hindquarters with the hide on, and Holm was very sorry to have to handle our Christmas pork in this wasteful fashion.

The Margaret was dry, but on looking for a camp site on the south shore we had great difficulty in finding one, as the plains, which were a fraction lower than the banks of the creek, were inundated by recent rain. We had no choice but to camp on the bank itself close to the bamboo jungle, where the mosquitoes were sure to eat us alive.

In the early morning we were in our saddles just as the large red sun rose over the horizon of the level forest plain. After a while we lost patience with the irritating laziness of the blacks, and packing their burdens on the horses rode on alone. Realising now that we should be considerably delayed in attempting to reach Glencoe and probably should have to spend Christmas Eve in the bush on very meagre rations, I set our course for Bridge Creek, the nearest inhabited place on the railway line. After nine hours' ride through very dry country, we reached the railway, and finding water we rested the horses and made a hasty meal on tea and damper.

In the cool of the evening we went on, intending to reach Fountainhead. As we passed the 'Howley' station, however, an old and friendly overseer on the line entreated us to spend the sacred evening with him and his old wife. Accepting this hospitable offer, we enjoyed the unusual luxury of a table presided over by a woman, and having spent a sociable evening slept soundly on the verandah until morning.

On Christmas Day we proceeded to Glencoe, the owner of this station, Mr. W. Laurie, having been kind enough to offer us quarters for the rainy season. Christmas celebrations were here in full swing after the rough and robust fashion of the bush. A roasted sucking pig was served at dinner and was duly washed down with the potent waters dear to the heart of the Australian cattleman after the long intervals of absolute sobriety which his lonely and simple life compels. Throughout the following hours the celebrations were continued with all due drunkenness, culminating in a feast on Boxing Day. The whole population of the vicinity, consisting of about a score of white men and a few hundred Chinamen from the mines and gardens, was invited to Glencoe, and after races and various sports held a carouse, the main features of which were whole roasted pigs and various other foods in profusion, besides liberal quantities of strong and potent liquids. This orgy, the details of which defy description, lasted until sunrise the next morning, ebbing out with the dwindling supply of liquor. After this followed a compulsory sobriety, and the routine of everyday life was resumed.

After the new year the rains set in in real earnest, and with short intervals it rained almost daily until the first days of March. Throughout February for a fortnight we thus saw no glimpse of the sun, and during this period we suffered considerably from the wet, which during the violent showers easily penetrated the ramshackle iron shanty where we lived. Although the house, which, by the way, consisted of only a single room surrounded by a broad verandah, was situated on top of a hillock, the violence of the rain often flooded the whole of the concrete flooring, inside and on the verandah too. Most of us slept on the verandah, and when a tempest as usual broke

during the night we were disagreeably awakened by torrents of wind-driven rain, which forced us to shift our beds and mosquito curtains to the lee side of the house. My bedding was wet almost every night, and really dry blankets only occurred during blissful dreams.

Holm's health during this period was not satisfactory. He had several attacks of fever. I personally was now quite well and fit, and old Laurie and the other four stockmen of the station appeared quite immune. They were 'salted' long ago.

After the violent spells of rain the long lagoon below the station rose above the banks, and the surrounding plains were transformed into a large and shallow lake. When the rain ceased for a few days the waters in the vicinity of the lagoon would again subside for a short time. The low wooded ridges which rose above the plains were certainly not flooded, but the soil, consisting mainly of sand and ironstone gravel, was saturated with water to such a degree that a man on horseback everywhere ran the risk of being bogged.

During this period the fact that we lived in a tropical country was forcibly impressed upon us. When warm and sunny days followed the first long rains, which had thoroughly saturated the soil, there was at once an immense development of vegetation. An invisible power appeared to press the vegetation through the surface of the earth, which until lately was bleak and desolate, exhibiting only a scanty stubble after the grass fires of the dry season. Along the shores of creeks and watercourses, where in the dry season only the dead leaves of the bamboo covered the naked soil, a surprising wealth of plants now sprouted. Vines and other creepers wound upwards among the trees on the banks, large yams (*Amorphofallus*) spread their deep green stalks and leaves over large stretches of the shores, *Dioscorea transversa* ran their creeping stems between the broad green leaves of beautiful *Calocasia* which covered the steep banks of the creeks. Of course all of this did not appear at once. An accurate observer would have noticed the first shoots directly after the first rain-squalls of the season. But only the advent of the full rainy season caused the real outburst,

the simultaneous and apparently sudden starting up in all its luxurious exuberance.

The green conical and inch-thick shoots of the bamboo (*Bambusa arnhemica*) had long been visible in the jungles, but now they began to sprout in real earnest and with incredible rapidity. After a few days' rain with following sunshine, one might see shoots which previously had been only just visible stand more than a yard high.

The growth of the large grasses was no less rapid. In a couple of weeks they would attain a height which seemed to be more appropriate to trees than to grasses. As a rule the grass exceeds the height of a man. Very often it stands higher than a man's head when he is riding, and in certain places I have seen it reach a height of twelve or fifteen feet. This grass impedes progress through the forests to a serious degree, and a ride through the grass during this season is absolute hell. This is also largely owing to the quantities of grass seeds which are continually scattered over the rider and which bore through his clothing and into his very flesh. These grass seeds are indeed so troublesome that they have entirely prevented the raising of sheep in Arnhem Land.

Just below the house a narrow lagoon wound along between scattered groves of screw-palms. At Christmas time it was fairly shallow, and the cattle and hogs of the station had transformed its once crystal waters into a turbid and muddy liquid. At the beginning of the dry season, when buying my horses, I had seen and also taken fish in the lagoon, but now, to all appearances, these had become extinct. We attempted to catch some with a bait, but quite in vain. Not a rise could be seen on the surface, even on calm evenings. And then, after a period of violent rains which caused a considerable rise in the level of the lagoon, the water suddenly became alive with fish once more! The surface was everywhere broken by their rises, and with a small Indian casting-net I had no difficulty in catching several species. These fish had probably been hidden in the muddy bottom in a torpid state, and the arrival of the fresh rain water had enabled them to resume those activities of life which the stagnant water

of the all-but-dried-up lagoon had forced them to suspend temporarily.*

Periodically wading birds appeared in large numbers, being generally seen after heavy rains, when the plains were flooded. Long-legged oyster-catchers ran about in the shallows, flocks of sandpipers and birds of allied kinds filled the air, scattering over the plains. Snipe were everywhere squatting in the grass and various birds fringed the lagoon. Every day the loud trumpet of the Australian crane would be heard, and the gigantic black and white stork (*Mycteria australis*) would march solemnly through the shallows of the plain. Many were the rifle bullets that were fired from the house, but the birds were never touched owing to the immense range. To get a decent shot was quite impossible. One evening I shot a specimen of the common curlew.

Now and again we saw the large white-bellied sea-eagle (*Haliaeetus leucogaster*). This species belongs to the coasts and the large rivers, but during the floods it appeared to extend its migrations to the interior. As soon as one of these giants was observed we were not long in seizing the opportunity, and we were successful in getting a pair of the fine birds. On the whole the number of birds of prey which inhabited this country appeared surprising in consideration of the fauna. For a tropical country the bird and animal life which could support birds of prey was not particularly plentiful.

Most of the forest birds were now busily engaged in building nests. The propagation of these birds seemed to be confined to the rainy season to a much larger degree than that of most other higher vertebrates. This does not preclude the breeding of many indigenous birds in the dry season also, but the main breeding among them occurs during the rainy season.

In the small and slender 'box' trees about the station house the busy 'magpie larks' (*Grallina picata*) built their mud nests, and before long the tiny young were heard twittering, while the parents fluttered about in panic when we approached. The blue-cheeked honeysucker

* I captured 6 species in all, and of these no less than 3 species were new to science: *Anodontiglanis Dahli*, *Copidoglanis Glencoensis* and *Copidoglanis Obscurus*. H. Rendahl, *Nyt Mag. f. Naturvidenskab*, 1923.

(*Entomyza cyanotis*), a large species of the Meliphagidae, also nested during this period, and I observed a very curious fact about their method of building,—that several birds united in building the nest. I actually observed as many as four or five birds busily engaged and mutually assisting one another in building a mud nest in the fork of a tree. This common nest-building habit appeared to me a very curious phenomenon. It must certainly be due to some very remarkable conditions in the breeding and domestic life of these birds, but what these conditions were baffled my investigations.

Our life on the station was associated with the loneliness inseparable from life in the Australian bush. We shot and preserved specimens, when the weather permitted, and had the mortification of seeing most of our skins eaten by insects. If the plains and the surrounding forests were too flooded, or if the heat were too intense, we used to ride out, shooting from horseback. Now and again we assisted in such station work as the taming of wild horses which had been fetched from distant parts of the continent and which Mr. Laurie was breaking in for the Batavia or Singapore market.

Our food was the usual meat and bread prepared by a Chinese cook. Butter and jam also appeared on our table and, on rare occasions, potatoes. Sometimes an immense craving for fruit or vegetables would assail us, but these luxuries were very rarely obtained at Fountainhead. Close to the Fountainhead gold mine a couple of Chinamen ran a garden, and the crop exhibited a fair variety of produce. It was almost incredible what they could produce. They got very cheap Chinese labour, and they lived, like all Chinamen, 'on the smell of an oilrag.' In this locality, where a white man would not put a spade to the ground, they cultivated onions, cabbages, sugar-cane and ginger. They even raised quite a fair crop of rice.

When our food at the station became too monotonous we varied it with game. Now and again the 'whistling duck' (*Dendrocygna vagans*) would appear in large flocks which settled on the lagoon. Swimming or crawling, we would stalk these flocks, and at a fair range a couple of

shots would supply a substantial bag of this fine game. Another species of whistler (*Dendrocygna Eytoni*) also appeared on occasions, but in far smaller numbers. The whistler is the commonest duck in Northern Australia, and gigantic flocks roam from swamp to swamp and from one lagoon to another. Like the black and white goose this duck very often perches in trees, and the toes of the bird are, like those of the aforesaid goose, only half webbed.

The rosy cockatoo, generally termed 'Gala' by the colonist (*Cacatua roseicapilla*) occurred in large flocks, never far from water. Large rose-coloured patches of these birds were to be seen in the plains, where they fed on the ground. A few shots often sufficed to procure a sufficiency of this very palatable bird for the table.

The large red kangaroo (*Macropus antilopinus*) lived in a range of hills some distance off, but as a rule they were very wild. I remember bagging one. I was riding through this range, and was walking my horse along the base of a hillside when I discovered two kangaroos, a large 'old man' and a small doe, which were both grazing on the hill above me. Immediately dismounting I crawled along through the grass, leading the horse until I could obtain a favourable chance for a stalk. The animals showed some sign of alarm, but seeing only a horse they confidently recommenced their feeding. Having tied the horse, I made a short stalk from tree to tree, finally firing my express at the shoulder of the 'old man' at about one hundred and fifty yards. The doe was off at a terrific speed at the sound of the report, but the 'old man' came down, rolling down the steep hillside. When I came up to him a little muscular twitching of the enormous fists and powerful limbs was the only sign of his having been alive.

Having skinned him I regained my horse, which became restive at the smell of blood, doing his utmost to break away. Thanking the Gods and the Adelaide saddler for a strong bridle I succeeded, however, in calming him, mounted, and finally got home at a brisk pace. At the station we all feasted on the enormous and savoury tail of the kangaroo, and it may be worth recording that this banquet disagreed with us all promptly and profoundly!

A method of hunting which afforded us some pleasure and interest was treeing large lizards with my dog. In the station paddock, where no natives but the station horse-boys were allowed, large iguanas were very plentiful. Gould's iguana was particularly numerous, and another allied species was not uncommon. We used to take out my dog 'Pup,' my inseparable friend from Arenbarra. He had been trained by the blacks and was a past-master in hunting iguanas, and the natives soon had him rushing through the grass in wild pursuit of the game. Very soon his loud barking would announce that the lizard had taken refuge in a tree, from the top of which it could be seen looking at us with spiteful eyes as we approached. Lumps of anthills served as missiles, shots being deemed wasteful. Very soon a lucky throw would knock the iguana off the branch, and, tumbling to earth, it was immediately engaged in a short and disastrous combat with my friend 'Pup.'

Now and again, when of considerable size, these iguanas really showed fight. On one occasion I had knocked one more than a yard long off its branch, and reaching earth it made off, hotly pursued by the dog, who did not feel equal to coping with this heavy antagonist. Running swiftly round I met the big beast with my large hunting knife. The reptile made straight for me. I missed the first stab, and should undoubtedly have felt its teeth and claws somewhere, probably in the thigh, had I not swiftly repeated my blow with better aim. This time I hit the brute over the head, killing it on the spot.

Almost everywhere in Arnhem Land one finds ant-hills, which sometimes attain an enormous size. These hills are generally of an irregular conical shape, with numerous cone-shaped towers or spires. Very often they may be so regular and beautiful as to remind one at a distance of the outlines of a Gothic cathedral. These conical anthills attain, as I have said, an enormous size, and I am quite certain that I have seen them fifteen to eighteen feet high. The accompanying photograph will give some idea of their dimensions. The specimen shown was, I believe, the largest ever seen by me.

These anthills may also have another shape. They



MARY, A GIRL FROM QUEENSLAND, GLENCOE STATION.



ANTHILL NEAR PORT DARWIN.

may take the form of a broad and sharp wedge, very rarely exceeding the height of a man. These peculiar anthills are always arranged with their longitudinal axis pointing due north and south. Such hills occur particularly in the vicinity of the coast and are probably made by a species of white ant different from that which makes the ordinary cone-shaped hills. Nobody has, I believe, been able to give a satisfactory explanation of the peculiar north and south orientation of these hills. I can only record the fact, which is so established that the use of the compass may be dispensed with when one is travelling in a region where these 'magnetic' anthills abound.

Locally the common anthill may occur in such numbers as to form veritable 'termite towns,' and constitute the most striking feature of the landscape. This massing of anthills was mainly observable in the vicinity of large open plains. Around Glencoe they were exceedingly numerous. They could be seen in all sizes and stages of development, from the gigantic old hill with numerous spires and minarets to the tiny first beginning shaped like a sugar-loaf.

From Inspector Foulsche of Port Darwin and also from others I had some time previously had certain reports which made me suspect the existence of some unknown marsupial about the head waters of the Mary River, towards the central tableland. This animal was described as being a kind of small kangaroo, living partly among stones and rocks, partly also in the trees, and being distinguished by a peculiar spike or crook at the point of the tail. My informants had heard the blacks trying to describe this animal. I asked the natives about it, too, and they assured me that the animal in question lived after the fashion of a rock wallaby, but possessed a tail like an opossum.

I knew very well from experience that reports of this kind may be very misleading, the limitations of language making the native description very imperfect. But I had a feeling that these rumours of some animal unknown to the whites of this region, and never seen by them, might have something in them. I was even inclined to believe the animal to be a kind of tree kangaroo or some allied

species. As is well known, the tree kangaroos are only represented by two species, one being known from New Guinea and another being discovered by Lumholtz in Northern Queensland. A discovery of similar or allied species in Arnhem Land would be of the greatest interest.

I had for some time planned to make an expedition in search of this unknown mammal. To go to the Mary River during the rains would, however, be impossible, the ground being too boggy. I had perforce to await the close of the rainy season. I intended first of all to venture on a short trip to Mount Shoebridge.

In the afternoon of March 13, 1895, we packed our belongings, said good-bye to our genial host at Glencoe, and rode to the Fountainhead store to obtain the necessary provisions. We did not want very much. Flour, rice, tea, sugar, matches and tobacco, besides a few pounds of onions, formed the bulk of our provisions. We bought a goat and, having killed it, salted the meat in our pack bags. Then we spent the night at the store.

The following morning I was up early to bring in the horses. During the night they had of course wandered towards Glencoe, which for such a long time had been their pasture. After breakfast we mounted. Our lightly loaded horses stepped briskly along towards our goal, the distant range of Mount Shoebridge, which very soon became visible from the low ridges we passed in the forest land. 'Pup' trotted along, hunting quails and lizards in the long grass, birds of prey were circling in the air, parrots were screaming, and the screech of the white cockatoo echoed through the forest. And the low morning sunshine fell on the luscious green of the trees; everything in our surroundings seemed to exhibit the immense vitality which was still pulsing through this wilderness. We felt as if this mighty Nature bade us a smiling welcome to the quiet life of study, the intimate comradeship with animals and plants which is the privilege of the few who have lived the hermit's life in lonely forests.

We followed the track towards the Howley gold mine; but now and again even the hard track was so waterlogged as to necessitate large detours to avoid

bogging the horses. At the Howley we got hold of a native with his woman and children, and brought them along to cook for us, to do the camp work and to hunt for specimens. Then we left the track, striking across country for Mount Shoebridge. When last we had gone through this region the grass had just commenced sprouting after the fires of the dry season, and the soil had been covered with swarms of young, not fully developed grasshoppers. Now the grass rose like a forest about us, reached yards above our heads, and formed a jungle which greatly impeded our progress and entirely altered the character of the landscape. We attempted in several places to fire the grass, but to our regret it was not yet dry enough to burn.

Finally we reached our destination. The blunt cone of the mountain rose before us above the forest, the deserted houses of the old tin mine became visible in the park-like wood. It was almost like a home-coming. In all their desolation our old quarters appeared to us peaceful and comforting. But the thin grass stood tall as a man around the verandah, and inside the house the blacks had rummaged and of course had taken everything they had any use for. A couple of camp-beds which we had made from sticks and old flour bags had been ruined for the sake of the bags, and we were forced to sleep on the hard floor.

We established ourselves after our usual routine. Holm prepared the specimens and did the cooking. I roamed about with the blacks, shooting and collecting. Birds we obtained in plenty, among these many species never previously observed by us. But the animal I was most anxiously looking for, the 'dokoin,' proved elusive. Of course a good many strange blacks were not long in arriving, but, although I set as many of them to work as I possibly could, the desired result was not obtained. It seemed impossible to get this animal.

One day, walking through the forest in the company of a native, I happened to rest on the bank of a creek. Looking down, I found at my feet the dry excrement of a dingo, containing among other débris the skull of the common small rat (*Conilurus penicillatus*), the 'pelke'

of the Hermit Hill tribe. Jokingly I asked the native if he knew the skull. "That one dokoin," he answered. I had thus for weeks been putting in an enormous amount of work hunting, and that in vain, for quite a common specimen which my collection had long possessed.

This 'dokoin' hunt nevertheless did some good. The blacks found several other small mammals, and among other things I obtained a specimen of the beautiful flying squirrel (*Petaurus breviceps*), which is by no means commonly met with in the forests of the interior of Arnhem Land. Towards the coast it appears to be more numerous. It has a wide distribution and probably occurs all over tropical Australia. Nundjala occurred in small numbers in the hollow trees, and finally we succeeded in obtaining a specimen of the animal which the Hermit Hill natives had named 'jirian.' It proved to be the common marsupial weasel (*Dasyurus hallucatus*), generally called 'native cat' by the colonists.

Bird collecting was, however, our main work and a variety of species was obtained. Among other things, Holm on one of his rare shooting trips was lucky enough to bring home a pair of the mighty Australian eagles (*Aquila audax*), a bird which, though not uncommon in the forests of Northern Australia, is exceedingly shy.

On an excursion among the mountains I saw several things of interest which were set down in my journal as follows:—

" Mount Shoebridge, 16 March, 1895.

" Arrived on a ridge I observed to my joy several large caves in one of the isolated table mountains. I had long expected to find such caves, as smaller caves were common in the precipices and steep walls of the tableland. The native remarked that his tribe used to inhabit these caves in the rainy season. Notwithstanding his protests as to the excessive distance to these caves, he had to follow me, and after a long and trying march we arrived at the foot of the mountains. Along a path made by kangaroos and natives, we ascended the steep side of the hill and arrived on a narrow neck which divided the mountain from the main tableland. After a march along this narrow neck we finally stood under the brow of the precipitous

mountain wall. Along the foot of this precipice we now proceeded by a precarious pathway, and in a few minutes arrived at the first of the caves. It was comparatively low, but would easily shelter from ten to twenty people. Coals and ashes, as well as bundles of dry grass, plainly proved that the cave even during the last rains had rendered a safe shelter to the sons of the forest.

"The rock was, as far as I could see, formed of some soft stone and the walls of the cave had been polished in queer rounded forms, and smaller niches and hollows with smoothly polished surfaces were visible everywhere on them. In short, what I saw was absolutely similar to the system of caves one sees in the coast rocks at Port Darwin, and it quite convinced me that these caves in the Mount Shoebridge tablelands were also the work of the ocean.

"From this cave the black led me under the precipice to three other caves, possibly of still larger dimensions, which were connected by a path worn by naked feet probably for thousands of years. The caves had obviously from time immemorial served the aborigines as a shelter during the rainy season. No traces of sculptures or rock paintings were visible. To the south-west between the mountain and the solid Mount Shoebridge tableland was a wild and narrow valley, and below us at the bottom of this valley I could see a small and now deserted camp of bark shelters which had been built and temporarily inhabited during the last rains.

"We finally scaled the flat summit of the mountain, and from the eastern side we started a stone of about half a ton, which went hurtling down the steep hillside. Large trees broke before the impetus of the rock. Then it hit another boulder, and breaking in many pieces cut innumerable diminutive paths in the long grass straight down to the foot of the hill, where a frightened kangaroo fled in long jumps."

Now and again blacks from the Daly paid us a visit. Among others, Harry Housfield's murderer 'Nammy' spent a night with our blacks in the kitchen. The majority of the natives who happened to visit our camp at Mount Shoebridge belonged, however, to the Warai tribe, and on

one occasion I jotted down the following fragments of their vocabulary :—

tobacco (excrements)	..	..	nguk*
opossum	..	..	uidda
kangaroo	..	..	taninn
wallaby (<i>Macropus agilis</i>)	..	..	bulak
anteater <i>echidna</i>	..	..	guarang
fire	..	..	wurk
tree (wood)	..	..	jumbalk
stump	..	..	bamdjebak
dead tree	..	..	anlallalāā
stone	..	..	gere
mountain	..	..	gere
paperbark	..	..	gaere
pandanus	..	..	marinn
bamboo	..	..	anbuin, matbar
leaf	..	..	djula
grass	..	..	djitbam
earth	..	..	juel
dog	..	..	ngiri
hand	..	..	annabarr
head	..	..	annbam
hair (on head)	..	..	medja
„ (on body)	..	..	tjaal
arm	..	..	auguru
leg	..	..	andjarr
foot (toe)	..	..	angobarr
tail (penis)	..	..	anlain
ear	..	..	anganinn
testicles	..	..	anmalk
breast	..	..	tjytjytt
eye	..	..	andunn
nose	..	..	angi
mouth	..	..	anjele
tooth	..	..	anladma
tongue	..	..	anjen
beard	..	..	djaoarck
nail	..	..	angobat-birlin†
ankle	..	..	angoro

* In all the tribes I met the same synonym was employed for tobacco and excrements.

† long i.

to give	..	..	..	..	woo
to come (give quick)	..	..	..	..	bano
to run	..	..	..	..	lelema
to spear	..	..	..	..	wudma
to climb	..	..	..	..	woi
give me food	..	..	..	..	bano moia
" " "	..	..	..	..	woo moia
to make fire	..	..	..	..	wurk talerma
go and fetch water (quick)	..	..	..	..	giga wak ban bud- manjaa
to boil water	..	..	..	..	wak mi ban-ngumbuno
go and boil water	..	..	..	..	ban ngumbono jong

The enormous forces of life and growth which the rainy season had stimulated had now long reached the culminating point, and the process which was to have the effect of breaking down and reducing the vegetation to its original components was already in full swing. Only occasional rain fell now, and the long grass dried up day after day, collapsed and broke. The vivid green of the forests faded, and mounting a hill to obtain a view of the illimitable forests we could see the smoke of distant grass fires rising towards the sky. This was the first sure sign that the summer of the tropics was past. Very soon tongues of fire would sweep the land, leaving the earth black and bare. Travelling became possible and we left Mount Shoebridge for ever.

CHAPTER X

THE VICTORIA RIVER

At Fountainhead we began preparing for our expedition in search of the abovementioned and presumably unknown mammal. On this trip I was likely to want more horses than the four which were our present outfit, so I bought a young and strong mare. Riding home with my purchase, I had a very lively turn with her. She was barely broken to saddle, and like many of her Australian relatives was a firm believer in the system of bucking. The dealer who witnessed the preliminaries of our departure would obviously have enjoyed a spill on my part as a welcome diversion. But I managed to cheat him, and the mare soon became a kind and trusty little nag.

As early as the following day I had to alter my plans. Lindsay Crawford, a gentleman who had spent his best years in practical explorations and cattle ranching in the north, and who was well known in these parts, arrived at Fountainhead. For a long series of years he had managed the Victoria Downs station belonging to the firm of Goldsborough, Mort and Co., of London, Mr. Stevens being the Port Darwin agent of the firm. Mr. Crawford had now resigned his position and was on his way to Port Darwin in order to assist Mr. Stevens in his annual expedition to the mouth of the Victoria River. All the provisions for the station had in fact to be brought by sea to the river mouth. Thence a ketch had to take it further up the river to a point whence the stores could be carted up to the station on waggons. I had met Mr. Crawford on some previous occasion and with the straight good-fellowship typical of most men of these parts he urged me to accompany him on the trip as a guest. He said he would take the risk of inviting me on behalf of Mr. Stevens.

The down train was due in an hour. I considered the matter for about two minutes, rolled up my swag, threw

ammunition, preservatives and instruments into a bag, and added my rifle to it. I was indeed very glad to get this opportunity of seeing the Victoria and giving its fauna a cursory examination; for I had long been determined to see this country before I left Arnhem Land. In case I found conditions favourable I might arrange for a longer stay later on. Our proposed expedition for the new animal could very well be deferred. In a fortnight the natives would have burnt large grass areas, travelling would become easier, and our horses would get better pasture. A little holiday would do Holm a world of good. Admonishing him therefore to fatten himself and amuse himself by shooting, or by riding our new and lively mare, we left him at the Fountainhead store, and boarding the down train travelled north.

Arrived at Port Darwin in the evening, I obtained quarters for the night, and meeting Mr. Stevens the next day was very hospitably received. We were to start on the following morning, and Mr. Stevens was busily employed in loading up the *Victoria*, a beautiful decked steam launch of some 16 tons burden, besides a ketch that had to be towed down for use on the Victoria River.

Before going further I may be permitted a few remarks on the history of the Victoria River. More than half a century had elapsed since 1839, when Captain Stokes on H.M.S. *Beagle* discovered and charted the lower course of this the most important of all the rivers in Northern Australia; and it was more than forty years since Gregory in the 'fifties examined most of its course and tributaries. Yet, in spite of the reports from these men telling a tale of vast lands suitable for agriculture and cattle farming, bisected by a mighty and navigable river, and possessing a climate preferable to that of Arnhem Land, the Victoria River had been almost neglected.

The first men who penetrated along its waters dreamed of a rich settlement. Ships would ply on the river, a colony would grow up, as powerful as a European State. These men had long been lying in their graves, and the waters of the Victoria still sped to the Indian Ocean in almost virgin solitude. In the 90,000 square miles of land, whose rainfall fills the river, white men were at that time

settled in three places. And they had not been there many years.

Nearly two hundred miles from the ocean was the Victoria Downs station, situated on a tributary called the Wickham River. On a tributary of the Baines, which runs into the Victoria from the west about sixty miles from the sea, was the station Auvergne. Finally, on the Shaw River running into the Victoria from the east, a little above the Baines, was situated the so-called Bradshaws' sheep station founded in 1894. Fifteen years ago there had not been a single white man in this region, and colonisation commenced with the establishment of the Victoria Downs station. Stevens had been instrumental in this, just as he had been the promoter of most attempts at cattle raising and cattle export which had been made in the Northern Peninsula of Australia. Since the days of Stokes and Gregory few ships had visited the Victoria, and the little launch *Victoria* was probably among the first to use this route for business purposes, one of the pioneers of trade in these lonely parts. |

In the evening of the 1st of April we boarded the *Victoria*. Besides two Chinese engineers the crew consisted of Mr. Stevens, Mr. Crawford, the author, and lastly another guest, Mr. Sabine, of the Government Survey in Port Darwin. It was arranged that we should steer by turns, and the day was to be divided in watches of an hour. The ketch, which was to be towed, was manned by an old Cornishman who for many years had been in the pearling trade on this coast. Besides there were also two blacks.

I quote from my journal:—

“April 2, 1895.

“At four o'clock this morning we weighed anchor and steered past the lighthouse and away to sea. Just outside the bay we all but ran into the old wreck of the steamer *Brisbane*, of which only a few inches of the stem were now visible at high water. The current set us more in than we had calculated, and a wave, hollower than the average, suddenly revealed the wreck immediately ahead of us. Putting the helm hard over, we passed only a few feet from the rusty iron of the wreck. In the evening

we anchored at Cape Ford, south of the mouth of the Daly."

"April 3, 1895.

"We steamed the whole of this day without any event, anchoring at sunset in Treachery Bay, where the blacks in the early days had attacked Stokes, and where the whites, who have very rarely attempted to land, are said always to have been attacked by the natives. During the day I saw a quail more than five miles off the shore. It came from the west making for the shore. I was, however, unable to ascertain the species. Once or twice during the day we passed deep indentures in the low land. These were probably river mouths, and I hold it probable that some larger watercourse must exist between the Daly and the Fitzmaurice River."

"April 4, 1895.

"Weighed anchor before the break of day and ran into Queen's Channel. The large MacAdam Range loomed blue and heavy in the east at the mouth of the Fitzmaurice River, and to the west of the channel broken hills rose above the dry salt plains along the shore.

"A peculiarly wild scenery lay before us as we entered the mouth of the Victoria itself. Broken tablelands with steep precipices gleaming in white and ochre alternated with wild and torn hills. A scanty low vegetation was growing among the sandstone of the hills, where soil appeared to be scarce. Large heaps of rocky *débris* and precipices with black caves and dark deep crevasses loomed up above the glittering snow-white salt-flats, which could be seen between the mangrove bowers of the shore. The tropical sun overhead produced a white-hot glitter from the broken sandstone, and deep shadows rested in the clefts and broken rocks. No sound appeared to stir the still air of this desolate land. Only our propeller was heard beating with even throb the grey water which parted whistling before our sharp stem.

"We anchored before long in Blunder Bay, and Sabine and I went ashore to explore, followed by one of the blacks. An enormous flat of dried mud stretched away for miles, surrounded on both sides by rugged and broken ridges. The surface of this mud plain was covered

by a thin gleaming layer of white salt, obviously left by the sea water which during high spring tides had inundated the plain, and under this salt-layer the mud was still somewhat soft. Along the left side of the plain wound a creek carrying clear and sweet water. Tall reeds grew here and there along its shores, and an iguana disappeared in the reeds as we approached. Otherwise few living creatures were to be seen. Some small species of *Malurus* and *Meliphagidae* fluttered among the bushes at the edge of the plain. A couple of quails rose from the scanty grass by the creek, and I shot one of them.

"We then proceeded along the southern ranges which were broken up in bewildering forms. Now and again we made small excursions in among the rocks and ridges and saw a couple of rock wallabies. A peculiar brown species of pigeon with a white patch on each wing flitted quietly from rock to rock, and I shot one specimen. It proved to be the rare *Petrophassa albipennis*. Several small springs came out of the glens running into the creek at the foot of the range. A thick layer of ochre on the bottom of the watercourses indicated the presence of iron.

"The principal grass in the rocky ground was the so-called 'spinifex.' The sharp spikes of this grass pricked our legs, and its strong resinous scent pervaded the atmosphere. Several species of *Verticordia*, tall as a man and reminding one largely of heather, formed a prominent feature of vegetation among the sandstone rocks.

"The heat was oppressive in spite of a strong wind blowing down the valley. Few sounds were heard. Only now and again the soft cooing of the little long-tailed pigeon (*Stictopelia cuneata*) fell on our ears, and in the overwhelming stillness and desolation of this landscape the sound might be mistaken for the distant 'cooe' of some native savage. It was the barest and most desolate tropical landscape I have ever beheld, and what life there was appeared to lead a shy and sneaking existence, as if going in perpetual fear.

"We kept a good look-out for blacks and kept well together. We were now in a region where it was necessary to be on the alert, and where a meeting with the natives unawares might have unpleasant consequences.

"On our way homeward after a couple of hours' walking we found a small bay of the plain where a running brook came out of the range. I here saw three or four specimens of the large boabab or bottle tree which is unknown in northern Arnhem Land. The large jar-shaped trunks and the bulging tops of these curious trees rose out of a minor vegetation of grass, wattles, and small clumps of tea-trees. We secured some of the large nut-shaped fruits which strewed the ground in profusion, and measured the largest tree, which proved to be eleven paces round the trunk. On the bark of this tree appeared an age-old sculpture made by the natives. It consisted of a couple

of grotesque figures as shown in the accompanying sketch. The left figure obviously represented a snake, but the meaning of the other was quite unintelligible to me.

"We fired the grass and immediately the kites appeared, just as is their habit in Arnhem Land."

"April 5, 1895.

"Victoria River.

"Early in the morning we took the blacks and the Chinamen ashore to fetch water at the mouth of a small creek, which tumbled into the river over low broken rocks a little above our anchorage. We kept well together while carrying our water

buckets to the shore and emptying them into the boat. Blacks might appear here at any moment and with hostile intentions. In the mud of the shore I saw the tracks of opossum, and upon our return two sheldrakes (*Tadorna radja*) passed over, one of them dropping to my shot. Having loaded up the ketch, we boarded this

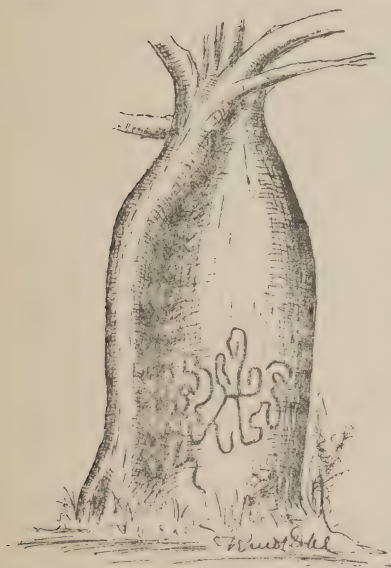


Fig. 5.

BOABAB TREE WITH NATIVE
CARVINGS ON THE BARK.

vessel, leaving the Chinamen and one black behind on the steamer. We left them a couple of guns, and they were sternly admonished not to go ashore and to keep a sharp look-out for the blacks. The tide set in, we hoisted our sails, and tide and wind carried us through Whirlpool Reach, a fitting name for this locality, where enormous and swift eddies swirl around the sharp rocks which protrude into the bend of the mighty river.

"Quite recently a mob of blacks had here crossed the stream. On both sides of the river, which was about a thousand yards broad, appeared a wide track from their feet in the soft mud. The natives of the Victoria possess no canoes, and their only way of crossing the river is to swim across on a log or a dry tree. Our old Cornish sailor-man told me that he had here once saved two blacks who, quite exhausted and helpless, came drifting on a log in mid-river. The ebb tide had got hold of them, and they were in the last stages of exhaustion.

"The appearance of the river landscape gradually altered. The tablelands became grander and mightier, but the hills were still very broken. After tacking from one shore to the other we finally anchored a little before sundown under a steep table-mountain. I landed with Sabine and Paddy (the black boy), but saw nothing but *Meliphagidae* and *Malurus* species besides the tracks of kangaroos and opossums. There were numerous traces of bandicoots and rats, the earth being honeycombed from the excavations of the latter. We fired the tall grass and pulled out to our vessel. The sun now set in a fiery glow behind the steep promontories of the tableland. The smooth water reflected the grass fire which ran its broad and flaming wedge up the side of the hill, and in the shifting shadows of the billowing smoke under the darkening mountain hundreds of kites were circling. Sometimes the birds would soar into the red glow of the setting sun to float again into the volumes of the rising smoke, hardly visible in the bluish shadow of the mountain. Along the shore small flitting sand-pipers were reflected in the black water, and as the night darkened the flames of the grass fire rose higher and wilder, casting a lurid glow under the rising whirls of the smoke. The barking call of the night

owl could be heard through the crackling of the immense fire."

| "April 16, 1895, *Victoria River*.

"Weighed anchor at three o'clock in the morning, drifting quickly up the river with the tide. After a couple of hours we anchored off a low plain under some hills. On arriving we heard natives shouting on the opposite side of the river. We howled an answer, and after a while we saw four blacks cross the river swimming, about a thousand yards above us. They landed and approached, hidden behind the river bank in order to investigate us according to their cautious habits.

"After a while they rose above the bank just off our anchorage, and the oldest, who walked down the bank at the head of the others, placed his hands on his breast and then suddenly flung his arms wide as a sign of peace and goodwill. They stopped several times in a hesitating manner, and the leader repeatedly flung out his arms, shouting the name of a white man who had previously sailed up the river with provisions, and who had been in some contact with the blacks.

"We beckoned* them to come on, and they commenced to swim the short distance which separated us from the shore. Several times they stopped undecided, obviously fearing to be fired at, but discovering nothing unfriendly in our attitude they finally gained confidence, swam lithely along and climbed into our dinghy.

"We hauled them alongside. They knew a few English words and said 'Yes' to everything they were asked, as is the habit of wild blacks. One of them appeared to understand more than the others, and I was greatly surprised at the natives of these parts understanding a single word of English. The few Europeans who frequented the district very wisely kept out of their way. The boy, however, succeeded in conveying to me, by words and gestures, that he had once visited Pine Creek, a tale which was quite credible. Some natives, indeed, occasionally undertake enormously long journeys, partly in order to attend certain inter-tribal meetings, the import-

* When beckoning a native one has to follow the native fashion and move the hand beckoning downwards and towards the body. The European way of beckoning conveys no meaning to the Australian native.

ance and reason of which is very little understood, partly also to obtain a view of the white man, whose existence has been reported to them by other tribes. And from such expeditions a minute English vocabulary is brought back, the few words being eagerly learnt by curious friends and relatives of the adventurous traveller.

“ These four blacks were all boys, the oldest probably not more than 16 to 18 years and the youngest about 12 years. They were beautifully built, rather low of stature with heavy muscles about the chests, and possessing very shapely limbs. They carried themselves exceedingly well and their manners were free and insinuatingly civil. All had a hair belt round the waist ; they were all circumcised, and in addition all had had the urethra split open for about an inch. These slits commenced about one inch behind the mouth of the urethra and left a portion of the tube entirely open.

“ Standing in the dinghy they ate some bread, potatoes and biscuits. A liberal tot of ‘ Worcestershire sauce ’ which some practical joker poured out for them was tossed off with evident signs of pleasure and without noticeable effects. After some time the boat swayed a little away from the side of the ketch, and noticing this they all threw themselves down to the bottom of the boat, pushing away as hard as they could to bring the craft back to the ship. When we showed them how to do it they had a very hearty laugh over their own foolishness. But the whole episode was a clear proof that the natives of the Victoria were entirely devoid of any knowledge of boats.

“ We took one of the boys ashore to look for game, and sent the others for an old woman, who had once worked on the Victoria Downs, in order to make her a present of food. During our excursion through the tall grass of the plain we found a swampy lagoon, where we shot a couple of black and white ibis out of a large flock. I also shot two black and white geese who betrayed themselves by their grunting.

“ Arrived on board again, we subsequently saw a number of blacks crossing the river. Besides the three boys who had previously visited us, there were now half a dozen men of the same splendid build I had noticed

among the boys, a type of figure similar to what I had seen among the tribes south of Hermit Hill between the Daly and the Fitzmaurice. Just as among the latter, the hair of all the Victoria natives appeared to be straight. It seemed never to have been cut, being twisted into a large knot at the back of the head, somewhat after the fashion used by Malay women. All were perfectly naked, except for a hair belt round the middle. These men drove before them a middle-aged woman with short hair and wizened figure. They pushed her before them and into the water, quite close to the ketch, and, pointing to her, gesticulated and jabbered in their own lingo. She was evidently not the woman who had served at the Victoria Downs, but the boys had obviously understood that we had asked for a woman as a present, and these ambassadors of the tribe now brought us one as a sign of peace and goodwill. We made them understand, as far as possible, that we could not accept the gift, and gave them some food. Their faces expressed the queerest mixture of fear and foolish surprise, and they went away, apparently very dismayed at the white man's refusal to accept their woman.

"In the evening we went on and several times ran on to sand banks. We got off again, but touching—more or less—was fairly frequent. Finally we anchored under a large precipice (Rugged Ridge)."

"April 7, 1895, Victoria River."

"In the early morning we walked up the hill without any incident except getting a splendid view of 'The Dome' and surrounding peaks. On the flood tide we continued up the river. With 'Curiosity Peak' the mountains ceased on the south-western side of the river. The enormous, riven plateau, which follows the south-western side of the river, here drops almost sheer into the River Baines, which comes in from the west. And from the mouth of the Baines the south-western side of the Victoria is one gigantic plain reaching nearly to the borders of West Australia and running south almost to the foot of Jasper Range.

"On the eastern side of the Victoria, however, the mountains continue. But they now become less broken. The outlines become more even and massive, and the

sides of the tablelands and plateaus rise in huge regular terraces. Plenty of birds now appeared, such as jabiru, terns, and a variety of waders, among which I noticed whimbrel and oyster-catchers in large flocks. The crocodiles cannot be numerous in this river, as we have seen only one or two of them. We anchored at 'The Dome,' and going ashore climbed this peculiar mountain, the dome-shaped top of which rises above an almost perpendicular wall, which surrounds the entire summit. From this wall the broad sides of the hill sweep massively down towards the river and the valleys. Having roamed for



Fig. 6.

RUGGED RIDGE.

some time in the dry mountains, we finally found water by following the track of a kangaroo, and returning to the ship refreshed ourselves with a bath in the river.

“When the moon had risen we heaved up the anchor, and, while some of us slept under our blankets on the deck, two of us took turns at the long sweeps. These, aided by the flood tide, took us up the river. Mountain after mountain was passed quietly in the night; all were steep, all regular with flat tops and giddy drops towards the river. And the shadows fell deep and black under the heavy precipices, while the white silvery rays of the

moon whitened the thin forest of the hillsides and quivered in the waters of the river.

"Few sounds reached our ears in the night. Only the long sweeps squeaked in the rowlocks and the water plashed and rippled to their regular strokes. Towards morning we anchored off the mouth of the Shaw River, and all went to sleep."

"April 8, 1895, Victoria River."

"The mosquitoes were troublesome in the night. I rose early to skin my birds. Stevens, Crawford and Sabine took the dinghy up Shaw River to find the sheep station, for which we brought some mails. They returned, however, without having found the station, and we went on with the flood tide.

"As we advanced up the river bird life became more prolific as the shores became lower and the eastern ranges drew further back. Endless flocks of cockatoos—now white, now black—were flushed from the shores, whistling ducks by the hundred rose from the dense belt of mangroves which were growing almost everywhere under the steep banks of the river, and as we advanced we saw the mangroves entirely covered by flying foxes for more than a mile. I sent a rifle shot into them, but the bullet, which hit where they were thickly crowded, appeared to have no other effect at first than to arouse a humming noise as from a gigantic beehive. But the noise of the screeching animals increased and they began to rise, few at first, then more and more, until thousands upon thousands whirled with giddy speed in an enormous circle, like dead leaves in a whirlwind. The rush of their wings rose higher and higher, and the swarm was continually being increased from the myriads which hung in the mangroves. They were obviously so thickly packed that they were only able to fly away gradually. Finally the mangroves, which had been so full of bats as to appear like leafy trees, stood stark and bare; the flock split up and settled higher up or lower down the river, swarming about us in the air. The females all had two minute young which clung firmly to their breasts. Here and there a flock settled again, the individuals stacking themselves in layers on the dry tree-tops along the river. Very often thick branches broke

under the heavy weight, and I even saw some of the larger forked trees split and break under the enormous masses of animals.*

"We anchored at 'Sandy Island,' after having shot some whistlers, which we cooked for dinner. I went ashore on the island, which was densely covered by thickets and long grass, interrupted by little sunny slopes, obviously the playgrounds of numerous small kangaroos. I got a shot, but the animal unfortunately escaped me in the thicket. The species appeared to me to differ from the common *Macropus agilis* of the north, and I resolved to visit the island again on our way down the river."

The following morning we arrived at 'The Depot' after a night's stiff work at the oars. All our goods were unloaded and stored on the bank. There was not much here for my collection. The forest in the low hills which here surrounded the river was not very prolific of bird-life, and what there was appeared to be very little different from what I had found in Arnhem Land.

We did some fishing, and Sabine got a couple of small sharks (*Carcharias gangeticus*). Everywhere along the shore one could see the so-called 'squirting fish'—*Toxotes*—a broad fish a foot long at most. It almost invariably swims on the surface, feeding on insects. As soon as you throw a bit of wood, bark or similar object into the river these beautiful fish come swimming up, curious to see if there is anything for them, and a baited hook is taken almost as soon as it touches the water. The natives habitually spear them. The fisherman posts himself in a place where these fish pass, holding a dry twig in his hand. If the fish passes out of reach of the spear, he breaks off a piece of the twig and throws it towards the fish, which, thinking it is an insect, immediately investigates the morsel. Repeating this process, the wily native attracts the fish until it is close enough to spear.

The men who were to cart the provisions up to Victoria Downs had not yet appeared. They were two white

* As I stated in an article in *The Zoologist*, May, 1897, I believe this camp to have contained more than 30,000 bats.

men who spent the whole year at Victoria Downs, but did not belong to the salaried staff of the station. They reared their own horses and did some fencing work for the station. But the main object of their stay was to cart the station stores the seventy-five miles from the Depot annually during April and May. This was indeed a profitable business. They were paid twenty sovereigns per ton, and as the provisions of the station might exceed twenty tons the job was considered quite remunerative. But, as I shall show presently, this work entailed considerable risks.

The new manager of the station, Mr. Watson, however, arrived, accompanied by a black horse-boy, and as he was prepared to stay and guard the provisions we got ready for our journey downstream. It was essential for somebody to act as guard over the provisions. Last year the blacks had been so aggressive that the guards had had to barricade themselves behind the flour bags and keep up a continual rifle fire all night.

We had not proceeded far down the river when we saw some blacks on the bank, and one of our party suggested that we should try our rifles on them. This proposal was repudiated immediately by the wiser members of the party. There were, as far as we could see, four or five of the natives, and as we sailed along, carried by a gentle breeze, they followed along the bank. As is the general rule among these people, the oldest walked ahead, and now and again they shouted and gesticulated. After a time we reached a wider part of the river, where a gravel bank ran into a spit below some dense thicket. The blacks had run on to this spit and were beckoning us, shouting. We tied a great quantity of biscuits and tobacco in an old shirt, and steered towards the point, half before the wind. The blacks each took a piece of driftwood, obviously planning to swim out to us, but seeing us coming to them, they gave this up. We passed close to the spit, threw the bundle into the middle of the natives, gybed and steered towards mid-river again. In a moment a great multitude of men and boys had broken from the thicket, and with a deafening babel of shouts pounced on our present. Their ecstasy over these rarities presented to them by the white

men seemed very great, and, as long as we could see them they were gathered round the spot, and we heard them scolding and quarrelling just like a mob of crows round a carcase. I think none of us had any special wish to go ashore.

At Sandy Island we anchored for some time, and I landed and shot a kangaroo, which proved to be the common river species. A little lower down is the old site of Gregory's head camp of 1852. Stevens and Crawford knew the place and we landed. Close to the river bank was an enormous boabab tree and in the thick bottle-shaped trunk we found incisions representing the initials of Gregory and his first officer, besides date and year. From the camp to the river led a well-beaten path, which the seasonal changes of almost half a century had been powerless to obliterate.

In the evening we anchored off the mouth of the Shaw River, and the following morning we took the dinghy up this considerable stream, the lower course of which is navigable for smaller vessels for at least the first ten or twelve miles. Having rowed for several hours we heard bells and very soon saw the 'station,' an open shed surrounded by some other buildings of still simpler architecture.

Three Englishmen, a Brazilian and a Swede, besides a couple of Port Darwin blacks with their women, occupied themselves in shepherding a few thousand sheep, and appeared on the whole to lead a precarious existence. The Swede got very excited at meeting a Scandinavian. The station itself, as a going concern, looked pretty miserable. The houses were, to put it mildly, very sketchily built, all sorts of implements, as it were, floating around anyhow, and the wool, which was the result of the first year's shearing, being stacked in the open. A flood had obviously worked considerable havoc, as wool was seen high up in all the trees for some distance around. The local blacks were very aggressive and had taken a fancy to spearing sheep, and for this reason the shepherds fired at them whenever they saw them.

After a short rest we pulled down the river again, but, having to row against the rising tide, we had some hard work before reaching our ketch. In the afternoon,

on the ebb tide, we took the ketch further down the river to a place where, according to arrangement, the manager of the Auvergne station was to meet us on some business. We anchored at dusk, and having plenty of time went ashore and, making a large fire, baked some bread.

In the evening Mr. White arrived, bringing from his station a large chunk of fresh meat, a luxury we had not seen since leaving Port Darwin. A large roast was soon prepared, and going on board ship we feasted on roast beef and new bread; afterwards the customary gin bottle made its appearance, and, as the moon rose above the northern ranges illuminating the still landscape and the broad and silent river, we squatted on the deck smoking and drinking. Tongues were loosened and tales came trickling out, tales of a kind not usually told by sober bushmen: the fights which had been fought, and which were still being fought, between black and white men in these vast forests. All these tales had the same character; they all illustrated the same miserable story of an old race yielding to a newer and stronger one.

The next day we went on again, current, wind and oars assisting our progress. We anchored below Curiosity Peak, close to our old anchorage. I went ashore with Paddy, but saw nothing but whistling ducks, which we found in considerable numbers on the mud among the mangroves. Having waded through the mud for a long time we finally succeeded in getting within range of a flock sitting on the bank. There were upwards of fifty birds, and I got six or seven with the first shot. The second barrel secured two more as they rose. As part of the flock returned and passed me at a fair distance, I tried another shot and knocked down four more. After the three shots we picked up twelve dead birds.

"April 13, 1895, Victoria River."

"Sailed in the morning on the tail of the ebb tide, but after a couple of miles we were met by the flood in the shape of a gigantic tidal wave, which forced us to anchor. The current, however, ran so strongly up the river that we drifted about a mile with our anchor and twenty fathoms of chain out. The tide finally slackening, we set sail again and a fair wind took us down the ten or twelve

miles which separated us from Blunder Bay, where we ran alongside the little shining *Victoria*.

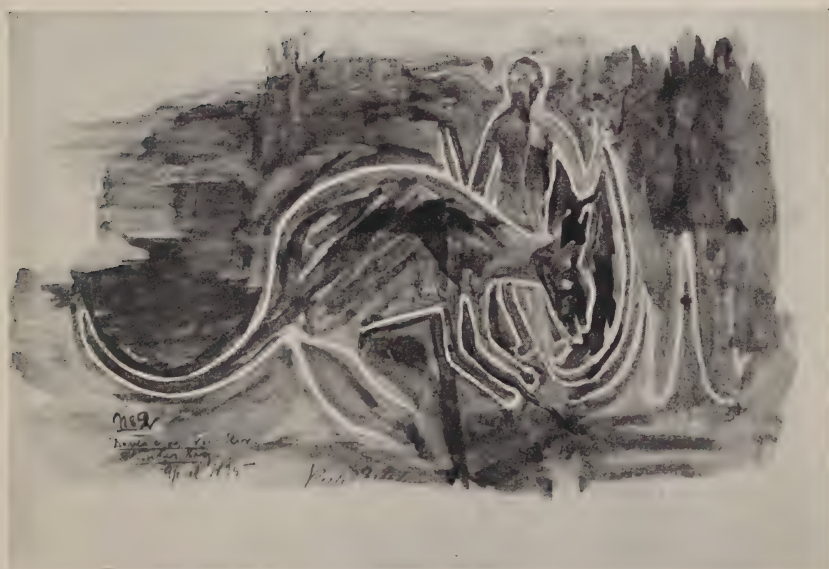
"During our last visit I had noticed a large cave in a hillside some two or three miles from the shore. This cave was situated about south-south-east from Blunder Bay, and the upper part of it was just visible above an intervening hill. In the hope of discoveries I resolved to go there. Accompanied by Sabine and one of the blacks I landed, and having waded about half a mile through the mud of the shore we cleansed our feet in a small spring which sprang from a mountain ridge. This ridge, which was very stony and covered with sparse verticordia and stunted trees, was crossed, and, after a short march through a plain covered with fairly large eucalypti and solitary cypresses rising from the long, thin grass, whence a red kangaroo was flushed, we arrived at the foot of the range, towards the top of which the cave was situated.

"The cave was now invisible from the plain, and we therefore climbed towards the upper precipice of the hill in order to follow it until we found the cave. A wilder and more confused chaos of rocks it would be difficult to imagine. A faint kangaroo path led us along at first, but very soon we had to trust to our own resources to find a way among the enormous scattered boulders which rose out of a fairly dense vegetation. In front of us we found a sort of rocky wall, and on attempting to follow this we found it broken up by enormous crevasses and a profusion of passages. Up and down these passages we crawled, and were finally confronted by one of the queerest mountain valleys I have ever seen. On one side an enormous overhanging precipice, and on the other an enormous chunk of rock, tall as a castle wall, almost excluded the daylight from a huge kloof, where dark trees seemed to disappear in the interior of the mountain, and where a shot at a fleeing wallaby set up dull and cellar-like reverberations. At the end of the kloof light appeared, and we crawled through. Just in front of us rose the wall containing the cave. An enormous mass of rock had fallen out, now forming the outer wall of the cave, while the living rock hung over as a mighty roof of

No. 1.



No. 2.



ROCK PAINTINGS FROM A CAVE AT BLUNDER BAY, VICTORIA RIVER.

(Photographed from Author's sketches.)

red and white sandstone. High up we could barely see a strip of blue sky.

"It was with a kind of solemn feeling that I parted the dense vegetation and stepped on to the very floor of the vault. As I had anticipated, the cave exhibited plain traces of having been inhabited by the aboriginals, and to my great joy I found the smooth sandstone wall entirely covered with specimens of native pictorial art. These were executed in white, red, black and yellow colours and represented, mostly in lifesize, emus, arms, human hands, trees, turtles, crocodiles, kangaroos, etc. I took sketches of nearly all of them and, having promised Mr. Stevens to hurry, regretfully left the cave."

The following day we transferred the rest of the *Victoria's* load to the ketch, and leaving the Cornishman and the blacks to take this cargo up to the Depot, steamed for Port Darwin, which we reached on the 16th of April. I here packed and shipped my collections and prepared to rejoin Holm at Fountainhead.

Before concluding this chapter I wish, however, to say a few words on the copies of some of the rock paintings which appear in the accompanying plates.

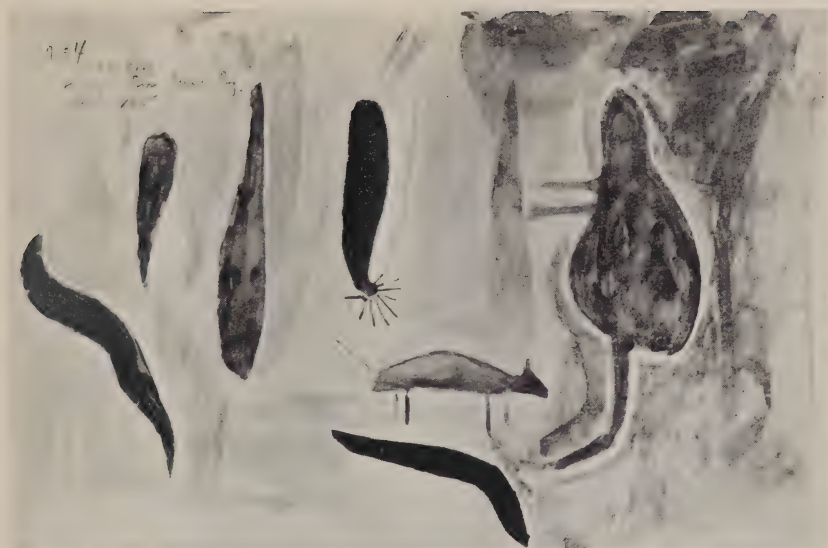
As previously mentioned in Chapter II., the aboriginals of Northern Australia possess certain aptitudes for art. Among the expression of these aptitudes pictorial art is undoubtedly the most prominent, and we meet it in various forms. They paint and tattoo their bodies in various ways, and paint and carve ornaments on weapons and instruments in naïve and primitive patterns. Very often these ornaments exhibit certain curious and grotesque patterns. The art in which the Australian savage shows at his best is, however, the simple reproduction of those objects of nature which are most important in his life. However naïve and simple these reproductions may be, we must recognise that some of these drawings are very well made, showing a fine perception of line and form. This is to my mind not at all surprising when we remember that the natives live in constant touch with nature and possess a wonderful knowledge of all kinds of animals and other objects around them. The only medium for conveying his pictorial art which the savage has is

the living rock, and in his spare hours he executes his paintings with the few and simple colours within his scope. Such rock paintings have been found in various parts of Australia, but the number known was at that time not very great. Our knowledge as to the quality and extent of such paintings could be increased with advantage, and new material might profitably be added to the small store of reproductions which record the primitive art of these tribes, whose fate it is to disappear from the face of the earth.

The fundamental principle of reproduction, the faithful copying of the object, is very well known to the savage. Thus he will place his hand on the face of the rock and sprinkling it with ashes or powdered chalk will stencil off a true copy of its outline. This style of picture was very common in the cave at Blunder Bay. In other localities in Arnhem Land I have found the same thing, and also drawings of fishes, which doubtless had been effected by similar means. Occasionally in Arnhem Land I also found crude attempts at drawing kangaroos, but such careful and well finished paintings as were to be seen in the Blunder Bay cave I found nowhere in Arnhem Land, though I have no doubt that such paintings do exist. The main feature about the majority of the Blunder Bay drawings was, moreover, that they had evidently been done from memory and not reproduced by mechanical means.

No. 1 of the figures in the plates represents an emu with outstretched neck, imitating the position of the running bird. A boomerang is seen above. I shall not venture to say if the artist has meant to indicate that the boomerang is about to hit the emu, thus attempting to represent a real episode, or whether the boomerang was placed there merely as a representation of the weapon of the chase. But when we examine No. 2 it will be seen that the first notion would not have been an impossible idea for the mind of the primitive artist. This figure is an undoubted attempt to represent a real hunting episode. A man is attempting to throw a spear at a grazing kangaroo. The two pointed tops stand for anthills behind which he is stalking the kangaroo. The kangaroo is not perfect, but in certain respects it is exceedingly well drawn.

No. 3.



No. 4.



ROCK PAINTINGS FROM A CAVE AT BLUNDER BAY, VICTORIA RIVER.

(Photographed from Author's sketches.)

No. 3 is a collection of various objects. A boomerang is clearly recognisable, a couple of trepangs of liberal dimensions are seen, a leech of gigantic proportions is represented, and a marsupial marten (*Dasyurus*) is easily recognised by its erect tail. But in the large figure to the right the imagination of the artist has obviously got the better of him and has induced him to picture a monster which is neither animal, bird, nor man.

In No. 4 we see a drawing which at first sight one would say was a fabulous animal, a figment of the artist's imagination. I am, however, inclined to explain it otherwise. Upon closer examination we see that in shape the head, neck and body are distinctly like those of a sheep. The artist has provided it with no less than three horns or ears, and has also given it an enormously thick tail, the thin point of which almost touches the earth. The drawing was, however, as large as a bullock. In my opinion the drawing may have been done by a native who had either had a cursory glimpse of sheep and cattle or possibly had only heard of them. In his eagerness to represent these animals to his friends he has mingled both species and produced the monster here depicted. In support of this idea I should point out that Australia now has no wild animal which attains the size of the animal represented.* The figure is of some age. This is seen from the chalk outline of a sea turtle drawn on top of the large monstrous figure. This would probably not have been done so long as the original figure was of actual interest.

* The extinct giant marsupials, for example *Diprotodon* (to which the figure undoubtedly presents certain points of similarity) have been extinct for thousands of years. Even if Australian aborigines had been contemporaneous with these extinct gigantic marsupials, it is in my opinion improbable that a drawing of the animal, executed in ochre, could have lasted for so long a time on the walls of this rocky vault.

CHAPTER XI

THE DISCOVERY OF THE ROCK PHALANGER

Upon my return to Fountainhead I found all well. Holm was in good health, the horses were in fair condition, and our new mare had been licked into shape. We prepared for immediate departure. We bought a couple of goats, and having killed them salted and dried the meat for packing. Luckily we were able to get some bacon at the store, besides which we also took a supply of rice and a quantity of large onions, almost the only kind of vegetable to be obtained. A sufficient quantity of flour was also bought, besides the usual stick-tobacco, tea, sugar, candles and matches. As a luxury we also bought a little tinned jam and a small quantity of spirits.

On the 24th of April we left Fountainhead with heavily laden horses, riding south-east along the railway line. Having passed the two railway stations, Burrundie and Union Town, where lived a few white men and a large number of Chinese labourers, we reached the Evelyn after five days' ride. The Evelyn was a gold mine. Situated on one of the many small head waters of the Mary River, and being worked by Chinamen, this mine was the eastern outpost of civilised enterprise in Arnhem Land. We passed the mine and went on until we came to a small running creek, where a number of blacks were camped. At a suitable distance from these we now made our camp, rigged up our awning of light canvas, and prepared to stay for a few days.

Late in the evening a heavy squall of rain burst over our camp. It appeared as if the rainy season wished to give us a last greeting. However vigorously the squall attacked us, the struts and spars under our awning were too solid and the pegs which held the canvas taut were too well driven in for the wind to move them. The moisture was, however, most uncomfortable. The rain

beat clean through our canvas and blew in from the sides. Finally, when the whole slope where we were camped was transformed into a sheet of running water, and our blankets and most of our possessions were entirely soaked, we threw saddles, pack-bags and boxes into a heap upon which we curled up and slept, fortified with a stiff tot of whisky. The next day all our belongings had to be carefully dried.

Before determining on a definite plan for my collecting work I wanted to find out from the blacks where a favourable locality was likely to be found, intending to use the blacks as guides. To begin with we engaged a native to look after our horses. Holm named him 'Beelzebub,' and I began to pump him for information as to the common mammals of the region. The main object of my expedition was, as previously mentioned, to try to get hold of the 'tree kangaroo' of which I had heard rumours. A number of Warai blacks had, upon repeated examinations, enlarged so much upon this animal that I had become almost convinced that it really existed. At least I had become convinced that some unknown mammal formed the substance of all these rumours and tales.

I now questioned even Beelzebub as to the existence of this wallaby that "walk 'long tree." But he laughingly denied the existence of such an animal. The other boys and old men who visited my camp were also questioned upon the subject, but I obtained the laughing answer: "Wallaby no more go 'long tree." I propounded the matter in various ways in order to make my meaning clear to them, but they laughed tremendously at the idea of a wallaby or kangaroo that should be able to climb a tree.

I felt downhearted and disappointed, but at the same time I could not get the idea out of my head that there must be something in the many rumours as to a strange animal, which I had heard of among the Warais. I felt convinced that I was on the track of some rare or unknown animal. The blacks who had mentioned its existence to me had also added that the animal was quite unknown to white men. There was no use in losing heart, and as I wanted some anteaters (*Echidna hystrix*) and the blacks

assured me that this animal was plentiful in some distant hills, I prepared an excursion with two natives the next morning.

The morning came, and an old man and a younger fellow—the two men I had chosen—arrived in my camp at sunrise. Breakfast was cooked and eaten in the presence of a number of hungry women and children. After their customary fashion they arrived at meal-time, endeavouring to get some food, and, squatting on the earth, surveyed with round and greedy eyes each mouthful one ate. During the meal two of the common black crows passed over, one of them carrying a small fish in its beak. An attack from the other crow made it drop the fish, which fell about eighty yards from the camp, and before any of the crows could reach it one of the black women had caught the prize after a lightning sprint. It was a small fish of a few ounces and, having roasted it on the coals, the woman devoured it with great relish.

I went off with my blacks, and passing the Chinese 'town' entered the forest wilderness, marching towards the distant hills, where my men assured me that the 'guarang' was plentiful. A long and trying march brought us to a small lagoon covered with beautiful blue waterlilies, and we shortly reached the foot of some stony ridges from which rose hills of a very broken nature, where heaps of enormous granite boulders were scattered among grass and forest.

The old man asserted that this was a good locality for 'guarang,' and therefore we fired the grass, seeking some place of safety until the fire should have cleared our hunting ground. A few flat rocks in the shade of luxuriant bushes invited us to rest and, crawling in under the overhanging boughs, I found a very beautiful nest or playing bower of the 'bower-bird' (*Clamydodera*). While I was examining the interesting structure the blacks lit a pipe, smoking by turns. The old man sharpened the barbed wooden point of his spear and Jackie stared emptily into space.

The fire spread, running up the hills, grew rapidly in volume and extent, died down among short grass and stones, only to spring into blaze again in long dry grass



TYPICAL 'WOGOIT' LAND.



HEAP OF GRANITE BOULDERS.

and creepers. It rose higher and wilder as the whole slope finally caught fire, the earth shook to its thundering roar, and half-burnt straws and ashes rose through the enormous volumes of smoke, while the tops of mighty trees swayed to the violent draught occasioned by the fire. Finally the earth was bleak and bare, covered with dust and ashes, and we could now easily carry on our hunt among stones and rocks.

Having vainly explored some long ridges, we arrived at a hill where enormous granite boulders were grotesquely scattered. Under a tremendous stone of thirty or forty tons I discovered tracks, and the old man assured us that a guarang had entered the cavity. Disappearing in the hollow which apparently was too narrow to admit a human body, he dug himself in like a mole, scooping out a quantity of earth and stones and sounding all the ramifications and crevasses of the hollow with a wand. Having worked for about an hour, he brought out a quill of the *Echidna* and said that he could smell the animal. Finally, however, he had to give it up, asserting that the animal had escaped by one of the many passages and had taken to another place of refuge. We consequently examined the vicinity but failed to discover tracks, and having shot a squatter pigeon and a small rock wallaby we crossed the valley to reach another hill.

Having found and eaten a kind of wild plum (a species of *Terminalia*), which being singed by the grass fire tasted somewhat like roasted apples, we found a series of water holes in the bottom of the valley. The water being sweet and clear, as is generally the case in the granite, we rested awhile, the blacks roasting the pigeon and the entrails of the rock wallaby for dinner. After our meal we set out for the hill, which was much steeper than the one previously examined, and where the chaos of rocks was quite fantastic. During our hunt we separated from Jackie, and the old man and I went round the whole of the hill. Now and again we saw a nimble rock wallaby darting from rock to rock, fleet as a shadow. But I only once got a shot, which unluckily missed.

Few living things appeared to inhabit the hill. Only occasionally a speckled quail was seen running over the

burnt earth between the boulders, and butcher birds or blue-cheeked honey-suckers were heard whistling their sad melodies on the slopes. The grass fire was still raging, and we could see it running up the side of a distant tableland, while far to the left and right the eucalyptus-covered ridges were ablaze. At length we met Jackie, who reported a guarang track, and the old man joined him in order to investigate it. Remaining behind I sat down, making a few entries in my journal.

The sun was far on the decline, and if we were to get an *Echidna* it had to be got quickly. After some time Jackie returned reporting the guarang to be in the hole, upon which report I took up my collecting bag, tomahawk and gun and, following him round a protruding rock, arrived at a cavity formed by a rock slide. It had, after the fashion of these caves, served as a resort for the blacks, and numerous mussel shells in the ash-heaps from their fires showed what was their fare during the rainy season. At one end of the cave gigantic boulders obstructed our progress, and climbing round we entered a narrow cleft, the bottom of which was covered by a dense clinging bush. With a great amount of labour this bush was cleared away. The old man now appeared in an opening among the rocks, asserting that the guarang was hidden under the bottom of the cleft. Having felled a stout tree for a crowbar, we now broke away the rocks and the blacks finally began to dig with a sharp stick.

The sun had now set in all the glamour of the tropical evening. I was wet through from hard work, had eaten practically nothing since breakfast, had not had a drink of water for several hours, and was now sitting listlessly watching the dark human forms which, like large apes, were scratching in the red soil of the dusky ravine. Outside us on the brink lay the large green bush we had torn away, and below us the grass fire illuminated the stems of the eucalyptus forest and ran in broad roaring sheets up the slope of a distant tableland.

The wallabies pattered about us invisible among the rocks, and the blacks scooped up the earth and gravel which rattled among the stones. Now and again they jabbered in their guttural lingo. A hollow sound now

appeared to indicate our approach to the chamber where the guarang was hiding, but to our great dismay a large shelf of rock barred all further progress. Scratching his woolly head, the old man cried: "Guarang, guarang, jaka," but we had to recognise defeat. The blacks professed hopes of getting the *Echidna* the next day, but we were all a bit downhearted as we descended the steep hill and took a direction which would set us on the beaten track to Evelyn. The old man was walking ahead lifting his legs very carefully to avoid stumbling, being obviously blinded by the still raging grass fire. By the reflection of the flames we discovered a hole in a rock full of clear and sweet rain water, and we all lay down and drank to our hearts' content.

Having each made a bark torch, we proceeded at a brisk pace and in time reached the beaten track, which in about an hour and a half took us past the site of the old Eureka silver mine and a lonely Chinese garden. As we were marching along the ramshackle fence of the small plantation the Chinaman's dogs set up a furious barking. Suddenly a jet of fire, followed by a tremendous report, burst from the banana grove which surrounded a humble hut on the opposite side of the garden. A projectile of some description whizzed past us in the dark, wide of the mark. The blacks were in high panic, and I shouted to the Chinaman to be careful not to shoot at white men. He thought, of course, that the dogs were barking at the blacks who came to steal in his garden, and naturally he fired. Another half hour's marching took us to the camp, where Holm had been waiting for us a long time. Without any ceremonies I started my supper and, having partaken of soup, meat and damper, tumbled into bed, dead tired, forgetting even to light my evening pipe.

The next morning I provided Jackie and the old man with some flour, as they wanted to go and camp in the hills with the object of capturing guarang for me. Promising a fair payment in flour and tobacco as soon as the guarang was brought in, I also persuaded a couple of other natives to join the expedition.

The forest in the immediate vicinity of the mine was entirely devastated by wood-cutting. Only a few birds

lived here, though I found some interesting things which kept Holm and myself at work. The field was soon exhausted, and I therefore planned to cross over to the Katherine River as soon as our guarang hunters should return. Day after day, however, passed without their re-appearing. Only one black had arrived with the news that they had killed a kangaroo and had eaten a number of snakes.

Our surroundings were by no means cheerful. The natives of the vicinity were lean and miserable, and they showed to a greater degree than elsewhere the stamp of degeneration. Wherever the black man comes into touch with low Chinese elements his ruin appears to arrive far quicker than when in contact with the white man. The reason for this fact is difficult to decide. Possibly opium plays a part. One thing, however, was obvious. The Chinaman does not make the native do work, as is the white man's custom. The Chinaman keeps the native, or rather pretends to keep him, for his wife's sake.

The laziness of the natives here was prodigious. All day they would lie in camp complaining of hunger. The banks of the creek were full of yams, iguanas swarmed in the forest, fish and water-lilies were only a little distance off, but nevertheless hardly any of the blacks would lift hand or foot to obtain food which would not have cost them an hour to collect. They preferred to lead a miserable existence on the paltry portions of rice and tobacco which they could earn in the evening by hiring out their women to the Chinese of the mine. They would do anything for a bit of European food, and I had never actually realised to what depths a native could sink till I saw a man greedily devour the leavings from my dog's meal.

On the 4th of May we were sitting under our awning after the day's work, eating our supper by the light of the flickering camp fire. Beelzebub had been given his rations and had been sent to his own camp. Having lighted our pipes we sat surveying the clearing where some isolated giant trees loomed against the still glowing evening sky. Numerous nightjars swooped silently close to the ground, only becoming visible when they rose against the red sky in order to catch a roaming beetle or a

fluttering moth. The cuckoo-like call of an owl sounded occasionally from the dense trees round the creek, and the chirping song of cicadas and grasshoppers pervaded the warm evening air.

Suddenly three dark human forms appeared over the low ridge in front of us, each carrying spear and woomera in the left hand. They made straight for our camp and presently slid noiselessly into the red glow of our fire. They proved to be Jackie and two other blacks, carrying in a bag an enormous specimen of *Echidna*. I immediately presented them with flour and tobacco, asking them also to hang the tea-bucket over the fire. With great dexterity Jackie immediately prepared a large damper, and very soon their strong jaws were busily employed in filling starved stomachs. All the time they talked with very low voices so as to avoid advertising their arrival to the blacks of the vicinity, and in order to remain in undisturbed possession of the gifts which they knew the white man would bestow on the successful hunters.

When his stomach was full and his pipe was lit, in the supreme moment of aboriginal bliss, Jackie began the tale of the guarang hunt. With easy gestures, low voice and in a picturesque blend of broken English and Warai he told the tale of how they had hunted day after day and how they had found numbers of guarang. But the animals had been hidden too deeply under the rocks to be reached. Finally they had in some far-away tableland, after endless toil, been able to secure the present specimen.

During our talk I led the conversation on to the subject of other animals, and repeated my questions as to the tree-kangaroo. As usual, this query was received with head shakings and a soft laugh. All at once, however, something appeared to occur to Jackie. He suddenly began an excited conversation in Warai with one of the other blacks, and after some time exclaimed, "Dat won wogoit." Upon my questions as to the nature of the 'wogoit,' he informed me that the wogoit was a large kind of opossum which spent the days in hollows and crevasses among the rocks, feeding in the trees at night.

This was, at all events, a mammal previously quite unknown to me; and a phalanger so obviously deviating

from the usual mode of life of the phalangiers should probably prove unknown to others also. We decided on the spot that Jackie was to go with us and capture the wogoit, and in better spirits and with better hopes for the future than had been possible for a long time, we placed a couple of logs on the camp fire and rolled up in our blankets.

The next day, however, Jackie raised several objections to an immediate departure. Personally he was very keen on going, but his mother had recently died, and according to the custom of the tribe the near relatives were not permitted to wash themselves before the whole family had held a meeting. He would under these circumstances await the meeting of the family in preference to an enforced abstinence from washing until he should meet his relatives later. I agreed that it would be hard to do without washing for such a long time—he looked badly in need of it—and I had seen too much of the blacks to laugh at a native notion which to me as a European appeared nonsensical. The only way to make them willing and useful is to attempt to understand their way of reasoning, to respect their prejudices and endeavour to shake them with arguments fetched from their small world of ideas. I cannot now remember the exact means of persuasion or the reasoning I employed on this occasion. I only remember that Jackie was gradually led to remember that the matter might be arranged if he could only see his uncle. As luck would have it the uncle made his appearance in the camp that same evening, and this settled our difficulties. Still, another day had to be spent in waiting for the Chinamen on the mine to kill a bullock so as to complete our meat supply.

On the 6th of May we broke camp. Jackie and our old guarang hunter were to accompany us. Beelzebub got the sack, which highly displeased him. A few miles to the westward, however, he suddenly materialised out of the wilderness, insisting on retaining his old occupation of looking after our horses. Unable to shake him off, and secretly respecting his determination, I submitted to the entreaties of the smiling idiot.

A few miles to the west of the ruins of the old Eureka

mine we entered the granite formation peculiar to this region and camped at a bend in a small running creek some distance off the beaten track. We arranged the camp as comfortably as possible. Our awning was carefully rigged up, a rack was made for our saddle gear, and large pieces of soft paper bark were cut to serve as a mattress under our simple bedding; in short we did ourselves as grandly as possible.

The flats along the creek had been recently burnt, and the new green grass would keep the horses quiet. To the south, in a wide valley of the tableland, a jumble of small hills composed of enormous granite boulders rose from the plain. Resembling the ruins of an old castle, this jumble of boulders rose above the luxurious vegetation which covered the hills. Jackie declared this to be just the right land for wogoit, and on a fine morning we started on our first expedition for this unknown animal. My outfit was gun and revolver; Jackie's equipment consisting of spear, tomahawk and the necessary collecting bag.

During the forenoon we vainly explored the hills of the vicinity, minutely examining clefts and crevices between the enormous heaps of granite. Sometimes the native would report having seen a wogoit which invariably fled into the inaccessible passages and fissures in the interior of the hills. Following the caverns and narrow passages among the boulders it was often possible to pass clean through the ridges. A bluish light would filter through the overhanging chaos of rocks. Our search was, however, in vain. The animals observed always fled into inaccessible places. In a small cavern, which I carefully examined, I found a lot of silvery hair, but I failed to discover the animal itself.

However, we did not lose heart, and tackling a fresh hill I mounted a large rock, from which point of vantage I could intercept any animals which should possibly try to escape. After some time I heard a call from Jackie, who on my arrival reported having seen a wogoit. But like the rest it had gone further into the rocks, and we began a systematic search of the enormous heap of boulders. It proved possible to crawl about through

practically the whole interior of the hill. But, however familiar we made ourselves with the topography of the cavern, no wogoit was to be found.

Numerous bats hung from the walls and roofs of the dusky caverns, and the frightened animals flew sharply screeching at the intruders. While Jackie was sounding every nook and cranny with his spear, I employed myself in killing bats, and after some work obtained specimens of two species. Using a short stick I hit them down. One small species, exhibiting a horseshoe-like projection on the snout, was always found suspended by the hind limbs, a soft quiver continually shaking the frail body.*

The second and larger species always clung to the rock with all four limbs.† When disturbed they would back up the rock with a comical movement, then for a moment they would sit with eyes and teeth glittering, and finally dart straight at the intruder. They were not easily caught, but I secured one which darted straight at my breast when I tried to get close enough to hit it with my stick. The call of both species was a sharp twittering cry like the squealing of mice and rats. The larger species appeared fairly indifferent to light, and when disturbed, individual ones sometimes left the caves, flying about among the tree-tops outside.

When on hands and knees I crawled about in the labyrinth of this pile of stones, I would sometimes find old holes belonging to the *Echidna*, and occasionally rock-wallabies could be seen passing through neighbouring passages. The rocks in the interior of this mountain pile were reddish brown and in some cases smooth as ice, probably owing to the drip of water during the rainy season for thousands of years. The thin, frequently up-ended flakes of granite gave a sound as of a muffled and distant bell, as they were touched by darting bats or by the nimble feet of the wallabies. In the end we had to give up our search in this rocky pile in order to try other hills. On our way towards these we were joined by Jackie's 'nephew,' who by the way was older than Jackie. I had no idea that he had followed us from the Evelyn till

* This species proved to be the *hipposiderus muscinus*, previously only known from New Guinea.

† *Taphozous australis*, not uncommon in Australia.

I saw a couple of long spears and a black human form darkening the sky on a rock above us.

A drink of water in the valley put fresh life into us and we commenced examining a new hill. I did a kind of 'sentry go' round the base of the hillock, keeping a sharp look-out for escaping animals. A rock wallaby and a nightjar, which I flushed from the earth, were all I saw, without, however, having a chance of securing them. After some time I heard a howl from the blacks and hurried up. Under a gigantic rock, which rested on another of about the same magnitude, a young wogoit was visible, screeching with fright. The other native chased it out with the butt of his spear and upon my request Jackie captured it alive, instead of spearing it, an operation he was very keen on performing. A large male wogoit was already speared under the rock and after some time came plumping down among the stones. It was a heavy animal possessing a beautiful silver-grey fur, shading off to reddish brown on the stern and tail. The intestines had unfortunately been pulled out with the barbs of the spear, and to prevent soiling I had to give the wounds immediate treatment. I had barely, however, had time to get out my knife, when I heard a rustling sound above me. Quickly turning, I saw a third wogoit come out of the crevice and begin to crawl up a slanting tree. Snatching up my gun, I ran some distance away to avoid shooting the animal to pieces, and a charge of No. 2 shot brought my long-sought quarry to earth.

During the hubbub the other black had seen his chance of spearing a native cat (*Dasyurus hallucatus*). The whole affair was over in a few minutes, and we immediately marched for the camp in order to preserve this rare animal while quite fresh. I knew at once that the species was quite new to science, and subsequent events confirmed my first opinion.

The animal was shortly described by Professor R. Collet in *Zool. Anzeiger*, No. 490, 1895, and his full description appeared in *The Proceedings of the Zoological Society of London* for the year 1897. He gave it the name of *Pseudochirus Dahli*, 'the rock phalanger.' In my paper, *Biological Notes on North Australian Mammalia* (*Zoologist*,

May, 1897), I have at some length described its mode of life from notes made on the animals in the wild state as well as in captivity. This large phalanger or opossum is entirely nocturnal in its habits, spending the day asleep in the hollows and crevices of enormous piles of granite boulders, choosing the darkest places possible. They feed at night, ascending the trees of the forest, and have a preference for the wild plum trees (*Terminalia*), also feeding largely on the flowers of various eucalypti.

On each side of the vent the wogoit has a very peculiar gland. The secretion from this gland is white and thick, resembling clotted cream and possessing a quite remarkable and charming perfume, very much appreciated by the blacks. As soon as a wogoit has been killed they struggle to secure the secretion from this gland, anointing their hair and body with evident signs of pleasure.

This hunting ground of the granite formation proved very good. Besides the wogoit, which naturally formed the main object of my pursuit, the caverns and crannies of the granite heaps were also the home of several other cave-dwelling animals. The fine marsupial weasel, previously mentioned on the Daly under the name of 'jirian' and later on secured at Mount Shoebridge, proved to be comparatively numerous in the granite. This 'native cat,' which is about the size of a ferret, has a pretty dark brown coat, changing to whitish yellow on the belly. The back is spotted with white. The species occurs nearly everywhere in Arnhem Land, being, however, most plentiful in the mountain tracts. Although it is sometimes found in hollow trees, the broken rocks and boulder heaps of the mountainous districts seem to be more attractive to this animal.

The beautiful little rock wallaby (*Petrogale concinna*) occurred in enormous numbers. This species, by the natives named 'balwak,' I have practically not met with outside this peculiar granite formation. In the deep chambers and crannies of the enormous piles of boulders, where the rays of the sun never penetrate, the little balwak spends the day lightly sleeping. It is very easily flushed and runs from rock to rock with astonishing activity. The swiftness and agility of the animal are almost incon-



THE WOGOIT (*PSEUDOCHIRUS DAHLI*).

[Face p. 208.]

ceivable, and, when observing one of these small wallabies running in the open at top speed, one might almost believe it to be the shadow of some bird flying swiftly overhead. At sundown they come out, and mounting high stones and rocks before commencing to feed they appear for some time to enjoy the cool evening breeze and the glow of the tropical sunset. The most minute noise will then alarm them, and silently, like flitting shadows, their light forms will disappear among the broken boulders of the granite. Occasionally they approach water in order to drink, but they do not appear to be so dependent on water as many of the other kangaroo species. They breed all the year round. Only one young one is born at a time, and the mother leaves it immediately when in danger. If one of these wallabies be wounded, she will instantly pull the young out from her pouch, flinging it aside, possibly to be able to run with greater ease.

The larger rock wallaby found on the Daly and called 'betbungo' by the Wolwongas (*Petrogale brachyotis*) was also found in the granite, but not as frequently as the smaller species. Jackie and the other blacks called it 'doria,' a name generally given to the species about the head waters of the Mary River. It is very widely distributed, occurring in almost every hill where heaps or piles of boulders are met with.

The little flying squirrel was also resident in the surrounding forest. Almost every morning these curious animals paid our camp a visit just before the break of day. They rummaged in our saddle gear and in our provisions and pack bags. But as soon as we moved to pick up a gun they would run swiftly up a large tree just in front of our awning, and spreading their parachute would sail into the dusk, disappearing before we could shoot.

Bandicoots were heard pottering about in the grass all night, and small rats, which appeared to inhabit the soil everywhere, dug holes in the middle of our camp. At daybreak they desisted from their burrowing.

Some birds were to be found, but bird-life was not particularly plentiful. Squatter pigeons would appear in small flocks about our camp, and a good many of these

innocent birds had to yield their lives to provide a savoury meal. The large bronzewing (*Phaps chalcoptera*), a bird the size of the domestic pigeon and deriving its name from the strong metallic lustre of its wings, occurred in small flocks around the granite heaps, and we availed ourselves of the opportunity of obtaining fine specimens of this beautiful species, which we had not previously met with. Here, as almost everywhere, quails were numerous and, walking in the small valleys between the hills, we could see these beautiful little fowls, active as mice, darting across the burnt soil of the open forest. Our life here among the hills of the broken granite became one continual hunting, exciting as hunting can only be when the prey is a previously unknown animal, a species never before shot by white men. I obtained several more wogoits, shooting them with gun or revolver, or catching them with my bare hands. To describe all these excursions in detail would, I fear, tire the reader. So I will only relate the adventures of one or two days:—

“9th May, 1895 (*Thursday*).

“Jackie and I went out this morning to hunt for wogoit. We walked for some time without meeting other game than balwak. Of these I fired at one, which escaped under large rocks. After a while we flushed another which disappeared into a large isolated rock, which had been cracked in many pieces. Jackie now wanted to work round the rock and drive the animal out towards me. Upon closer inspection he discovered it in a crevice apparently narrow at the top and only permitting the escape of the animal at the lower ends. We then approached this funnel from both sides, intending to drive the wallaby towards one another and finally capture it with our hands. I took Jackie's spear and poking it into the funnel touched the wallaby on the back. The animal at once approached Jackie's opening. Here, however, it turned, making towards the top of the fissure, where, contrary to our calculations, the aperture admitted of its exit. As soon as Jackie saw this manœuvre he rushed on to the top of the rock. At that very moment the wallaby darted out. I thrust at it with the spear, hitting Jackie lightly in the arm. In his excitement and eagerness he did not even

notice the spear thrust. The wallaby escaped his frantic clutch by a hair's breadth, and in a tremendous jump it set off from the high rock. Jackie lost the entire command of his wits, and, taking a flying jump after the wallaby, landed on all fours among the rocks about ten feet below. I jumped down and, taking the gun, managed to run clear of the rock and send a charge into the wallaby, which obviously settled it. Turning to Jackie, I found him lying among the stones, bleeding and looking very miserable. After a while he got up, shook himself somewhat after the fashion of a dog, and staunching his bleeding cuts with sand declared himself quite recovered! This after a nasty spill which would probably have had serious consequences for any white man. But the strength of the native skull is surprising.

"Passing a valley towards some other hillocks we fired the grass and rested at a small spring until the land was burnt clean. The hills presented a tremendous mass of tumbled rocks and boulders, and Jackie asked me to wait. When he had found a wogoit he would shout to me. After some time I heard his hoarse cooee and, breaking through the tangled vegetation, I soon found Jackie under a large rock, on top of which rested an enormous block of stone. In a crevice between the two rocks sat a wogoit, and I killed it with a charge of shot. I hoisted Jackie on to my shoulder and thence he stepped on to my arm, which I propped against the face of the rock. From this position he could reach the animal and pull it out of the crevice. It proved to be a female, a little smaller than the previous specimens. A very small young one was found in the pouch.

"Proceeding along the hill I took up a line of march above Jackie, in order to get a shot at wallabies which were flushed during his search among the rocks. I had already crossed the hill and reached the opposite slope when a large 'doria' slowly came out from the boulders where Jackie was busy at the moment. The broken nature of the country did not allow me to shoot until the range was almost excessive, but the animal fell to the shot among some large rocks. Running up I got sight of it about twenty-five yards away. After the fashion of wounded macropods it sat in a stooping position, but

upon seeing me it jumped behind a boulder. Running above the rock to get in a shot, I got a glimpse of it as it settled behind another rock. Jumping down on this rock and anxiously peering over the edge, I only found a blood trail. Jackie, shortly arriving, went down on all fours like a dog, following the track. In spite of my senses now being fairly well trained, almost like those of a savage, the track was almost invisible to me. We crawled over the top of the hill through thickets and piles of boulders. All the time we followed the scattered trail on stones and leaves and the faint footprints where they showed. The trail led us down the slope of the hill in and out of caverns and crannies. But in the end we lost it.

"Just as Jackie was making a final and minute examination of the vicinity of an enormous cracked rock, I heard him utter the hoarse 'Eh-eh, eh-eh,' which announces the sight of some quarry, and as I quietly sneaked up to him he pointed out a wogoit in a crevice above us. Rolled up in the semblance of a woollen ball, it sat sound asleep in the half light of the cranny. I shot it with the revolver, and after some trouble we got it out of the narrow crevice. Our spear and collecting bag had been left on the top of the hill, and having fetched them we now marched towards camp. Halting at a drop in the hillside, we both observed some light-coloured object in a cleft between two large stones, and Jackie sneaked closer to ascertain if it was a wallaby, as I could shoot from where I stood. He approached very slowly until about fifteen yards off. Suddenly I saw him align his spear, dart in and rapidly jab at the light-coloured object. A sudden light dawning upon me, I ran down and found an enormous rock snake firmly jammed between the spear and the wall of the narrow cleft. Having belaboured its head with a stick, we got hold of the tail and yanked the brute out of its stronghold. Getting a good swing on it, I whirled it round my head, finally dashing it on the earth with all my power. As it was still not quite dead, we jabbed a spear through the reptile and passed my hunting knife through its head. It measured a good nine feet and was as thick as my arm. Jackie's first operation was to bite a hole in its belly to see if it was full of fat. The



FOREST AND GRANITE.



A LANDSCAPE IN GRANITE.

test giving a satisfactory result, he grinningly remarked, 'Fat fellow,' flung the bag over one shoulder and the snake over the other, and stolidly took the lead towards the camp. The head and tail of the snake were trailing on the ground behind him, and his face exhibited the dignified ease peculiar to the Australian savage when returning from a successful hunt. After a quick march we reached the camp, where we rapidly filled our empty stomachs.

"Two strange blacks had arrived to-day and Holm had taken them out hunting, but without success. Returning home he lost himself entirely among the many hillocks until a mere chance brought him up against the camp."

"*May 11, 1895.*

"Holm went out with Beelzebub and the two other boys. Jackie remained in camp to help me to skin our wogoits. In the forenoon an emu passed close to the camp, but seeing it too late we lost the chance of shooting it. In the afternoon I made a sketch of Jackie, who was exceedingly pleased at the idea of my telling my countrymen of his merits. As it was close on sundown, and Holm had not yet returned, I took my gun and went for a walk on a neighbouring hill, where I examined a couple of caverns. On the walls of one of these I found two very primitive drawings in red ochre, made by the natives, and representing small kangaroos.

"After sundown an overpowering desolation appeared to fill these caves and caverns. The squeaky twitter of the bats and their clammy touch against my face and hands almost made my flesh creep as I worked up towards the daylight and vainly attempted to catch these elusive beasts. I spent the short twilight examining the forest of the hill and found only a couple of crimson-winged parrots, who screamingly left their quarters in a tall eucalyptus. Some white-cheeked honeysuckers flitted among the tall trees, and a lonely bowerbird sent its melancholy whistling notes into the gathering dusk. Far to the west a large grass fire glimmered on a distant hill-side and the smoke rose blue and heavy in the sombre night. Then I returned to camp, where finally Holm also arrived. He was black in the face like a nigger and practically worn out. He brought a native cat, shot

before a grass fire, and an echidna which it had taken them half a day to excavate." . . .

Jackie was absolutely the best hunter and tracker I have ever met in my life. But he had one regrettable drawback, which impeded his work, a drawback he could not help. On the inside of one leg just above the ankle he had a nasty open wound, the size of a hand. This wound was septic and had obviously been in the same

state for years. Many years ago, while still a boy, he had, according to his report, in his sleep happened to place his leg on the hot embers of the camp fire, burning it very badly. When telling me of this tragedy he always laughed immensely at the humour which to his mind was attached to the accidental cooking of a live member. A white man would probably have cried over the accident that crippled him for life. But the savage does not cry over pain, far less at the memory of pain. Nor is this tragedy of Jackie's anything unusual among these people of the forest. Their sleep is very heavy, and if during their slumbers they happen



Fig. 7.

JACKIE.

to roll into the fire, they do not wake before they have been badly burnt. The blacks very often exhibit ugly burns on various parts of the body, and little children are often seen badly singed by fire.

As mentioned, Jackie's leg was diseased and had obviously often impeded his walking, and even when he was able to walk he limped, only the toes touching the earth. In consequence of this disuse the whole limb was atrophied, being considerably thinner than his sound

leg and imparting a serious lameness to his gait. After some days' hunting the wound generally broke out again and Jackie was finished. I then attempted to wash, disinfect and bandage his leg quite scientifically. But antiseptic treatment is not much good when your patient removes your bandages at the first opportunity and, resorting to the only cure of the savage, sprinkles the wound with sand.

When Jackie was unable to work I had recourse to other natives, of which there was no scarcity, as we were continually being visited by natives migrating to a large corroboree at Union Town. But, however many of these natives I employed as trackers, none of them was able to find wogoit, and during the whole of my experience I never met any other native than Jackie who was able to track the animal. This species is exceedingly difficult to find, and its plentiful occurrence is probably due to the fact that very few natives have any practice in the hunting of it.

Jackie was also very proud of his prowess in the wogoit hunt. When restored to temporary fitness he again followed me out to our good hunting grounds, his ugly face radiated contentment, and he used to brag about the imminent success of our hunting, bragging as only an aborigine can brag. To catch the wogoit was his great speciality, and with the burning interest and equally burning vanity of the specialist he examined the rocky débris of the hillocks with an astonishing minuteness and attention to detail. When seeing him at work I had the exact impression of watching an animal of rare and trained instinct and incredibly sharp senses snuffing about among the rocks. Hearing, vision and touch appeared to centre on the same object, and even his nose seemed to be very useful to him. The wogoit does indeed possess a very peculiar smell which is a queer mingling of perfume and the opposite. This smell may be sensed at a considerable distance and, sharpened as my own senses now were through long training under primitive conditions, even I could at last trace the animal by this smell. It was, however, not mere animal instinct, not mere sharpness of the senses, which led Jackie. His intellect was also highly instrumental in the work,

and it was quite clear to me that his wonderful prowess in this pursuit was the result of extraordinary practice coupled with senses of a keenness only to be found in the savage of these forests.

Very often an enormous amount of labour and toil had to be gone through before we had our quarry in the collecting bag, and very often, too, Jackie's eagerness and excitement made him careless of his poor foot, which was repeatedly damaged. He would then alternately praise his own greatness as a wogoit hunter and loudly deplore the condition of his useless leg. But all the sorrows of this childlike soul were dispelled by a piece of tobacco and were blown away with the blue clouds of smoke which rose in the sunshine. When I asked him why he, and he alone, could catch the wogoit, he would grin brightly and answer something like this: "The other blacks have strong legs, walk quickly, without looking about. I have all my days had one long and one short leg, and I have always had to walk very slowly, very slowly, all day, and keep a keen and continual look-out for food." However slowly Jackie taught me to walk, I never acquired a sufficient practice in the wogoit hunt to enable me to hunt alone with any success. Now and again, when hunting in his company, I had the triumph of independently locating a wogoit. When this happened Jackie always seemed exceedingly pleased.

Thanks to all the visits we had from wandering blacks, our provisions began to run short, and I sent Holm with one of the pack horses to Union Town for supplies. After two days he returned and we continued our collecting work. Few events happened outside the ordinary routine of the day. The horses kept very quietly to the green grass along the creek. All day and night we heard the tinkle of the horse bells, a sound pleasant to the ears of the traveller in the Australian bush. Our life in the forest and under the white canvas of our awning was indeed a care-free and pleasant existence. Our sorrows were few and our pleasures were small and modest. The savage had become dominant in us. We were now so inured to this life that we no longer felt the loss of comforts which our former civilised life had offered. We no longer felt

the discomfort of sleeping week after week with a thin piece of canvas or at most a sheet of bark between our bodies and the hard and often stony earth. When we rose in the morning our limbs no longer ached as they had often done in the beginning of our rough life. No longer did we suffer the wild hunger for fat and for acid fruit or vegetables, which in the beginning of uncivilised life is so apt to torment the novice. We had learnt to guard against this, always having a store of bacon, and every day taking a little citric acid with our drinking water. And the coarse and monotonous food on which we had to live had to our senses almost lost all monotony. The idiom 'food' conveyed, as it were, no longer any other idea than that of bread and meat. Our fancy no longer visualised the dishes civilisation offers. Perhaps force of habit did it, perhaps we had learnt to manage our commissariat better than in the beginning. I do not quite know. I only know that this life pleased us, that we rarely bothered ourselves with thoughts that did not pertain to the necessities of the day, and that whatever cares we had generally disappeared with the smoke of strong tobacco, just as was the case with our savage followers.

Towards the end of our stay in this camp I got an attack of malaria. One day I was ill, spending the next day staggering about without being able to do any useful work. I hoped to get well again before starting on our long ride down to Fountainhead. In the morning I generally felt better, but in the afternoon the fever invariably set in, rendering me unconscious before midnight.

One morning I thought I could notice a decided turn for the better, and resolutely breaking camp we rode off. Jackie was given food and tobacco and was left behind at a creek further on. He was to meet us later on at Union Town in order to guide us on an expedition to the central tableland. Riding along in the afternoon I felt the fever coming on again, and I sat ill and swaying in my saddle until sundown. In this way we rode for three days and finally arrived at Fountainhead. But I remember it only as a dream, the forest, the endless ride under the glaring sun, and the camp fires in the evenings, when half conscious I assisted Holm in the necessary camp work.

CHAPTER XII

THE CENTRAL TABLELAND

After a couple of days I recovered, but then Holm went down with fever. During the following four or five days I wrote letters, and having registered my collections forwarded them through my agent in Port Darwin. Holm in the meantime lay delirious with fever until I succeeded in stopping the attacks with doses of quinine. As soon as he recovered we prepared for another expedition.

Jackie had told me a great deal about the large tableland to the east of the sources of the Mary River. According to his reports this locality was the home of a number of animals which did not frequent the regions so far examined by me. He gave special prominence to the occurrence of a large black kangaroo named 'tjikurr,' said to inhabit the caves of the tableland. He also mentioned several smaller animals, among them a large species of turtle, 'ngart,' which inhabited the running creeks. Even if these animals should not prove to be unknown, I considered it probable that the region mentioned would prove very interesting, as it had rarely, if ever, been visited by a white man, and certainly had never been examined by a naturalist. Besides, I also believed that the fauna of these mountain tracts would prove different from those I had found elsewhere.

On the morning of the 28th of May we rode off. The horses trotted briskly because our packs were very light, our intention being to buy provisions in Union Town. In the evening we camped at Lady Alice, one of the many watercourses which traverse the mountains between Burundie and Union Town. Splendid green grass covered the meadows among the screw-palms, and the creek held clear and sweet water. As everywhere in the forests of Arnhem Land there was an abundance of dry wood, and it

did not take us many minutes to start a gigantic camp fire from dry eucalyptus trunks. The sun had set and the short dusk of the tropics surrounded us. But the after-glow still lingered golden in the western sky. The queerly twisted and stunted forest of the desolate ridges was, as it were, veiled in the misty violet haze, which is peculiar to the evenings of the dry season, the winter of this part of the globe. The dusk of these evenings is very short and its fine colours quickly merge into the darker purple of the night.

We took our billicans down to the creek, and having filled them washed the dust and perspiration from our half-naked bodies. When we turned again towards the camp it was almost night. Our roaring camp fire shed a vivid glow on the stems of the forest and a pale new moon hung high in the heavens, gaining in brightness as the daylight waned. The glow of the fire became redder and redder and the brightness of the young moon grew, until the last ray of daylight had been vanquished. Then the moon and our fire appeared to start a competition in light, a fight in which Holm sided with the camp fire. We both liked the fire. When the crackling flames leapt high, spreading the glow far and wide over the white stems of the forest and over the desolate soil, our spirits rose. The little spot of the earth which for the moment was our home, increased in importance and comfort. And there is a joy in the reckless feeding of your camp fire, a peculiar, perhaps childish, feeling of unfettered liberty in the lavish heaping of the logs. Your store is the limitless forest.

The evening was passed in performing the usual functions. We baked a damper in the ashes, ate our evening meal, and lit our pipes. We had not much to wash up after our meal, and our feeding habits were, I fear, not according to the demands of strict cleanliness. The boiled bits of meat or bacon and the damper, which served us for dinner on the march, were generally carried in an old and, I regret to say, greasy bag; and during our meals our saddle blankets served as a tablecloth. But in our blunted condition we did not attach importance to these facts.

In the evening I shot a small marsupial weasel (*Phascogale penicillata*), a species which later proved to be fairly common in the interior of Arnhem Land.

The next morning we continued our ride. At high noon we reached Union Town. The only thing about this place that might justly be said to remind one of a town was its name. Sanguine prospectors in the booming days of the territory had given it this splendid name. A couple of gold batteries, a collection of low huts for the Chinese crew, and a couple of European houses constituted the 'town.' The name of 'town' is, however, in Australia employed with great generosity. "A shop, a pub and a jail, that's a town," is an Australian saying, and in many cases it is literally true. Here at Union Town even the jail was lacking. There was only a store managed by a white man, besides an old public house which for a long time had been out of use. At present, however, it had been taken into occupation by three people, husband, wife and daughter. They had been on their way from Queensland to West Australia with horses. Somewhere up on the telegraph line, three hundred to four hundred miles above Pine Creek, the man had broken his leg, and the family had now settled here temporarily to keep a 'hotel.' Travellers appeared to crowd the establishment at the rate of about one every tenth day.

The store proved to be short of flour as well as of rice and sugar, and we had to wait until the storekeeper could fetch a supply from Pine Creek. A Chinese butcher, living in the vicinity, could supply meat, and taking one of our horses I loaded it up with salt meat and then joined Holm, who had pitched our camp at a lagoon some distance away from the 'town.' We hung up the meat to dry in order to get it as light as possible for our long trip.

We had to put up with the delay caused by the lack of provisions. This was only the beginning of a series of mishaps. Jackie joined us very soon; but at the Union the storekeeper's dog was friendly enough to bite his sound leg very badly. Being now lame in both legs, it was out of the question for him to guide us to the tableland. On the following morning only my saddle-horse and the oldest of our mares were to be found. The others

were gone, Heaven knew where. For almost a week we rode about looking vainly for the horses, Holm, myself and the blacks taking this sorry work by turns. Finally Jackie returning one day told us that a Chinaman far north along the railway reported having seen three grey horses. These were in all probability our nags, and Holm immediately set off in quest of them. Jackie was quite knocked up after his rides, and the good news he had brought was almost counterbalanced by an enormous lump on the back of my old saddle-horse. Being a very bad rider he had lamed the horse, disabling it for an indefinite period.

I did a little shooting at home round the camp, but I could not very well leave it, as we were surrounded by blacks whose honesty in the vicinity of this Chinatown was very doubtful.

In the evening of the second day after Holm's departure I had baked a large damper and had just lifted the tea 'billy' off the fire when I sighted a large grey horse appearing in the defile leading from Union to our camp. It looked like 'Naba,' one of our horses. Two others followed, and on the last I recognised Holm. They soon reached our camp. My old horse greeted them with a friendly whinny, and I myself was no less pleased at their return. Holm had had to go thirty or forty miles for them, finally tracking them down half way towards Fountainhead.

Returning home one of the mares had fallen under him in rocky ground, a jagged stone tearing a wound in her left shoulder the size of a fist. But luckily the injury did not appear to affect her gait. Old 'Bony Bream,' my saddle-horse, could, in spite of his sore back, easily carry our lightest pack saddle, and on the 5th of June we got everything ready for departure the next morning. Jackie could not possibly accompany us, as his leg was too bad. But he promised to follow as soon as he got well. In the meantime his 'father,' who also answered to the name of Jackie and at present was dwelling at the Eureka, would probably be willing to guide us to the region of the 'tjikurr' and the 'ngart.' The next day we rode off, and finally camped for the night at our old wogoit camp in the granite. We spent the night in the still forest

under the silvery curtains of the moonshine, and went on again at sunrise.

At the Eureka we rested at our old camp site. A great number of blacks were encamped here in anticipation of a corrobborree which was to take place in a couple of weeks. We sent for Jackie's 'father' and two blacks appeared, both claiming paternity. Unable to decide between them, I solved the difficulty by taking them both on as guides.

Agodjalla, a native boy of the Alligator tribe, who had followed us from the Union, acting as horseboy, now suddenly became 'sick.' Possibly a preference for staying in the corrobborree camp was to some extent the true reason for his 'sickness.' He complained, however, of a headache and of pains in the body. These complaints may have had some foundation, as 'Naba,' one of the pack-horses, who disliked blacks, had kicked him in the stomach with great vigour. He obtained the medical assistance of one of his fellows, who treated his case according to his lights. Disappearing towards an old native camp, he returned shortly with an old tin and a splinter of a broken bottle. Having chipped the splinter to razor keenness, Agodjalla pointed out a place in his forehead which he considered to be the main seat of his illness, and seizing the primitive knife the medico inflicted a hearty cut, half an inch long, causing the blood to flow profusely. The old tin was now employed to receive the blood. According to custom it must not be allowed to flow into the earth in a strange land, lest enemies should get hold of it and by sorcery cause the death of the owner. Having been collected in a vessel, it has to be burnt. The operator, however, considered himself privileged to smear his woomera or throwing stick with it, although he belonged to another tribe than that of Agodjalla. The blacks as a rule like to smear their arms with all sorts of blood. When Agodjalla, without any visible signs of weakening, had bled about a pint, our horses were ready saddled and packed. Upon asking him if he wanted to go with us, he only shook his fat head, and I gave him a piece of tobacco and, mounting, rode away with Jackie's two fathers, 'Jackie' and 'Tommy.'

I had never seen bleeding practised as a cure among the natives, though I had known of the practice from hearsay, and I was not a little astonished at the quantity of blood taken, without apparently causing any inconvenience to the patient. I asked our new Jackie if this was the common cure for a headache. He only turned the back of his head towards me, drawing attention to a large scar, at least two inches long, half hidden in his dirty scalp. "Sick head, kill 'im tommihawk," he remarked, beaming.

During the day we crossed over to the main stream of the Mary River, camping for the night close to the river jungle, which loomed darkly against the surrounding forest of tall and white-stemmed eucalypti. While the crackling camp fire threw its red reflections on the dark forms of our black followers and on the straight stems of the trees round the camp, I took my gun and went for a walk in the moonlight in order to find an easy ford in the river. In the mysterious depths of the jungle the rays of the moon fell scantily and with an intense silvery sheen on foliage and bamboo leaves. Cicadas and locusts were singing, and small frogs stirred everywhere among the dead leaves on the ground. In the silent night the light leaping of the frogs made the leaves rattle as if stirred by the footsteps of large animals. I looked vainly for a suitable ford, and after some time returned to camp, followed by my true and trusty dog Pup. Later on during the night I had the great misfortune to shoot my poor dog dead, mistaking him for some wild animal, and I went to bed greatly saddened at the loss of my constant companion.

The next day we crossed the river and set our course towards the central tableland, from which spring all the large rivers of Arnhem Land. We first followed the eastern shore of the Mary. The blacks walked in front, guiding us and carrying my camera and some other things which might easily be injured on the pack-horses. In certain stretches the grass had been burnt and the passage was free. In other places the old dry grass, which had fallen down, like a rye field after rain, reached above the breasts of our horses and cut their forefeet cruelly.

Here and there we had to stop and shout to the blacks to fire the grass. "Wurk, wurk talerma" ("make fire"), they would repeat our shouted order, and pulling our matches out from their thick hair they would each light a grass torch. Very soon the grass would be on fire, tall flames roaring towards the sky. If we were lucky, the wind would swiftly sweep the fire along, the dry wilderness would be consumed in a few minutes, and our passage would be free. But in many places where the air was calm or the wind even against us we had to beat along as best we could, the horses rearing and dancing before the leaping fire. All along our track we fired the grass, as we wanted to be sure of new grass for the horses on our homeward ride.

The land became more hilly, small hills reaching towards the river bed. Very soon the wildness of the land increased, and travelling between the river jungle and the hillsides became difficult. The blacks guided us into the narrow valley of a tributary river. Along this stream were numerous abandoned native camps, where a number of bark humpies had been built during the last rainy season. Towards the central parts of Arnhem Land the blacks appear to resort more to the building of these bark shelters than do the natives of the coast lands. These highly primitive huts are constructed during the rainy season only, and are very simply made by sticking a few boughs into the earth and by roofing the shelter with a few pieces of paper bark. In all thickets and jungles along the bottom of the valley the ground was full of holes from which the native families had dug the yams that had served them as their staple food.

The valley gradually became narrower, and a mighty tableland rose before us. The sides of this tableland were so steep that it seemed very doubtful to me if we could possibly take the horses up. The blacks, however, insisted that the ascent could be made, and in order to rest the horses before the severe task we camped. Small pigeons abounded and I shot a couple, cut up their meat for bait and, rigging a primitive rod and line, began to fish the crystal clear pools of the brook which gurgled along between the bamboos and screw-palms of the banks.

Fish were plentiful, and they took the bait as ravenously as do the fish of a Norwegian mountain beck. The majority of the fish were of a greyish perch-like species,* which was very good to eat, but there were also other species, and a number of specimens were secured for my spirit jars.†

Followed by one of the blacks I also explored the ascent of the tableland higher up the valley. There was only one possible way up the almost precipitous hillside. If we took the packs off the horses we might succeed. First of all we took the horses up, and then we had to carry all our packs up on our finally almost exhausted shoulders. After this it was a real pleasure to sit well down in our deep saddles as we went on through the low forest on the tableland, following an old native trail.

On the brink of the tableland and just alongside the trail I observed a mound of stones obviously built by human hands, a sort of low cairn, where grass and soil filled the intervals between the stones. Our guides said that the blacks had built it, but for what purpose was unknown to them. They said it was extremely old. I have never seen anything like this cairn in Anhem Land.

The character of the tableland appeared to be in certain respects dissimilar to the nature of the land we had previously traversed. Water was more plentiful than is usually the case. It bubbled out of the earth in real fountains, and these fountains sprang from or under the very brink of the tableland. The interior of the plateau itself was comparatively dry. The abundance of water also manifested itself in the fact that the bottom of the depressions about the springs was covered with moss. In no other place in Northern Australia have I seen moss, and a strange feeling came over me as I heard the hoof-beats of the horses softened when stepping on the soft carpet among the thin grass. Not since I was in Norway had I heard moss soften the footsteps of a living being.

We rode steadily on eastwards over the softly undulating plateau. In some areas the timber was large and heavy, almost heavier than I had seen anywhere. In

* A terapon.

† Among others a species new to science, *Rhombosoma trifasciata*, Rendahl, 1923.

other patches the forest dwindled to an almost impenetrable wilderness of thin wattles or young eucalypti. The grass stood only about twenty inches high and, half dry as it was, the horses would not eat it. We had thus very small prospects of a good camp, where the horses would keep quiet in the night.

In the afternoon I felt an attack of fever developing and, had I been alone, I should have camped at once. But Holm was anxious to find a better place to camp, and we held on. The sun sank; we rode through burnt land. A grass fire had swept the ground a few days ago, and the earth and the lower stems of the forest were black as coal. Only occasional wattles had green leaves. Not a green straw was visible on the ground. The land sloped east; dusk came, while we spurred our horses, the blacks running with us. Finally we saw a mountain range looming blue before us between the white stems of the forest. At our feet a wild precipice broke away into a narrow valley, and from the bottom of this valley we heard the whisper of a river, one of the sources of the South Alligator River.

Following the edge of this precipice and riding through the burnt and desolate land we finally found a small spring surrounded by screw-palms and paper bark trees. Grass there was none, but we had to camp. We off-saddled. Silently, and cowed by the desolation of the place, the blacks fetched wood and lit the camp fire, and I lay down shaking with fever, while Holm prepared our evening meal. With the listless feeling peculiar to the fever patient, I lay staring at the flaming fire and the black and melancholy floor of the forest and at our poor horses, who were huddled close to the camp. Even they understood that there was nothing to be found in this place, and just stood still, hanging their heads and blinking their shining and sorrowful eyes. Old 'Bony' came over to me snuffling and poking my arm with his slack old lips. "Bread? Aye, boy, you will get a bite of bread." I gave him a piece of stale damper. The other horses poked in their heads and got their share. Gradually their spirits rose. The most enterprising of the mares began to crop the green wattle leaves of which the forest

presented a scanty store, and very soon the horses were busy eating.

I soon fell into a deep slumber, from which Holm woke me up as day was breaking. The horse bells could not be heard, and Holm went in search of the horses, while I prepared the breakfast. The blacks had been out on an early morning hunt, returning with a large snake, which they carefully roasted in the embers of the fire. After a considerable time Holm returned with the horses. Food being very scarce they had, according to their custom, attempted to go back to better grazing, had spent the whole night walking in their hobbles, and now were still empty and starving. It was out of the question for them to do a proper day's march, but the blacks assured us that the mountain of the 'tjikurr' could be reached in half a day.

We had to follow the course of the river below us. But the steepness of the hillside forced us to ride along the edge of the plateau. The forest now became more impenetrable than we had found it the day before. Dense thickets of *verticordia*, a scrub resembling heather but tall as a man, alternated with a thick undergrowth of young eucalypti and wattles. Here and there these forests were entirely dead, and in some places large areas of forest had been felled by cyclones, forming almost impenetrable obstacles to riding. The blacks had to break and cut a practicable road as we travelled along.

Everywhere the soil consisted of a coarse deep sand, and in this sand lived obviously millions of small rodents. The holes and burrows of these animals were so numerous that they evidently formed a continual network under the surface. This continued mile after mile. The hoofs of the horses broke through at every step, our travelling being thus greatly impeded. These small rodents, which often enough were a nuisance in our camps, and which we had often captured, were, however, widely different from the Australian rodents, the *Coniluridae*, which have previously been mentioned by me. They were real rats or mice, belonging to the *Muridae*. They were so widely distributed that they can hardly be considered as introduced, or at least not by Europeans. The common black

rat, which has been introduced, probably in recent times, either by Europeans or Asiatics, is to be found in and around the dwellings of Colonists. But I never saw a single specimen of this species in the forests.

These small brown rats, however, which were so numerous on this plateau, were to be found all over Arnhem Land and in such remote parts that I have no doubt that they have belonged to the fauna for a considerable time. Also, there were several species of them, but, owing to the lack of sufficient material, Professor Collett after my return declared himself unable to determine their exact identity.

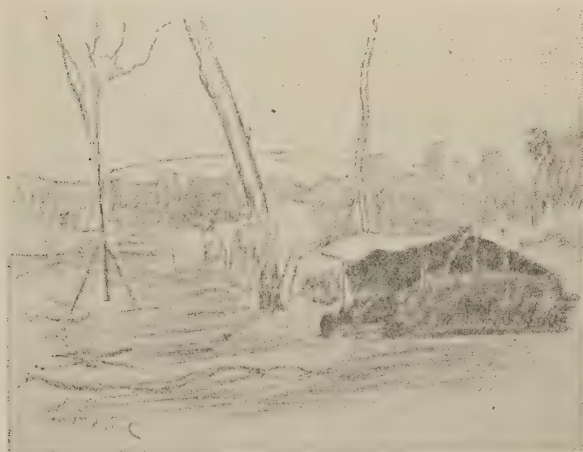


Fig. 8.
OUR CAMP.

The plateau of the tableland now began to slope eastwards. Very soon it broke up into heavy hills and mountains, and the forest became an open and heavily timbered park land. Through a valley we soon reached

a gentle slope, where the grass had been burnt some time ago. Green grass sprouted above the red sand and ashes of the ground, tempting our starving horses. At the bottom of a wide valley we saw the green timber about the South Alligator River, and before us on the other side rose a mighty tableland presenting bold and precipitous sides. Far to the south-east we saw the back of a still larger tableland.

We rode awhile upstream, finally camping on the edge of the wood close to the open and sandy bed of the river.

Our awning was soon rigged up, and north, south and east we built a dense screen of boughs and saplings about our 'house,' a 'breakwind' against the strong and stinging monsoon, which roared down the valley from the east, sweeping the sand in vicious blasts.

I got my fishing line out, cut a suitable rod, and resorted to the creek, where the first pool proved to be full of perch-like fishes. A small pigeon gave its life to provide my bait, and one by one I flicked the greedy fishes ashore. Holm soon joined me, and we presently made a large bag. All through the afternoon and the evening we feasted on delicious fried fish, and I do not think that the luxury of this meal would have been materially enhanced if we had known that we were feasting on a fish hitherto unknown to science.*

Tommy had during the whole of our trip worn one of the common broad wooden belts. This garment had of late become dilapidated, and in the afternoon he suddenly divested himself of it, breaking it in pieces. Instead of flinging the useless article away he burnt every little bit of it with the utmost precaution. Here, close to the borders of a strange land, in the vicinity of the Agigondin tribe of the tablelands, he had to take great care lest any of his belongings might fall into the hands of hostile natives, thus enabling them to hurt him by sorcery.

On the following morning I took Tommy with me, commencing to climb the steep table mountain, said to be the home of the tjikurr. As I mounted the steep side, the sun being at my back, I felt the approach of fever. In a waterlogged place under the steepest part of the hill we dug holes, which were quickly filled with sweet water. A drink from this revived us, and we reached the break of the tableland whence, through a gorge, we followed an old kangaroo trail to the plateau. Tommy proudly pointed out to me a place where he had once stood behind a bush and speared a kangaroo, which came hobbling along the path we were following. Close by he showed me the place—denoted by the cooking-stones—where he had cooked his prize. A large kangaroo is usually cooked close to the place of killing.

* The species was *Terapon Alligatoris*, new to science and described by Hj. Rendahl, *Nyt. Mag. for Naturvidensk.*, Bd. 60, 1923.

When we reached the edge of the tableland we began to search the broken country, which was partially covered by low vegetation, dense masses of *verticordia* being often prevalent. We had not advanced very far when a large grey kangaroo jumped up about twenty-five yards off. Just as it topped a heap of boulders I got a fair shot, but unluckily without effect, and the splendid animal was lost to us in the enormously broken land.

We now examined a great number of the wild ravines and boulder heaps of the table-mountain without, however, being able to discover any tjikurr, though droppings and tracks were present in great profusion. The latter obviously belonged to a large kangaroo, with shorter and stronger hind feet than the usual species. A lifeless and desolate stillness reigned between the gigantic blocks of sandstone, the grey boulder heaps and the *verticordia* thickets. Only the rays of the sun fell with a blinding glare over the landscape, and its pale reflection drove into my poor fevered brain, cutting like a sharp saw. Tired and worn, raging at this God-forsaken land, I trudged stubbornly on. We reached the other side of the mountain, where a tremendous chaos of boulders and precipices rose like threatening towers. A small rock wallaby rose and, settling itself on a large rock, looked curiously at me. Not wanting the animal, I held my fire, and the beautiful little creature danced off. Then I sat down, dead tired, in a defile, waiting for Tommy to beat the hillside below me. Not having the energy to find a shady place, I simply sat, half dazed, staring into the flaring landscape, vaguely wondering if I should ever be able to reach my camp again.

Suddenly, however, my consciousness was awakened. The face of the rock close to me was full of large caves and grottos. I climbed and crawled in order to examine them. Yes, indeed, the ocean had been here, thousands and thousands of years ago. The niches and caves, the overhanging caverns, were of the same kind that I had seen in the rocks at Port Darwin, also similar to the ones discovered in the tablelands of Mount Shoebridge. How insignificant did I feel as my fevered brain attempted to cope with the saga from thousands of years ago, plainly

told by the stark rocks! The distant forest plains, the low hills and the slopes below me, they had all been the bottom of the ocean, whose breakers rolled round skerries and isles, that were later to become the highest summits of Arnhem Land. And in the caverns where the kangaroos now lived, and the *verticordia* and the wild vine found a precarious hold, the waves of the ocean had gurgled and clucked, and strange antediluvian animals of the sea had crawled about on the rocks. There was I, a being of absolute insignificance, a mere lonely wanderer in the wilderness. What mattered it whether I lived or died? It would all be as nothing in comparison with the impressive story told by the rocks.

Late in the afternoon we at last managed to reach the camp, where I collapsed, surrendering myself to the delirium of fever.

During the two or three days which passed before I recovered Holm made some attempts at obtaining a tjikurr, but had no success. Every day, however, he brought something home for our collection, and had the luck to see a few of the black kangaroos. According to his reports they were very wild and wary. Only at a great distance would the animals leave their shelters in the caverns and crevices and appear among the torn sandstone rocks, where—so fleet were they—a shot would have been difficult even at short range. We also tried lending the blacks a gun, so that they might attempt a stalk by themselves. But, as none of them were proficient in the handling of firearms, they had no success.

Finally, I had so far recovered that I was able to potter about in the vicinity of the camp and do a little collecting. In the early morning I had sent Holm and Tommy to the table-mountain in order to look for tjikurr. I spent the morning in shooting and skinning a few specimens. Having made some bread and cooked some food I took a walk with my gun after midday. Returning shortly with a small weaver bird, that I purposed to skin, I found Holm and Tommy arrived in camp, busily engaged in filling their stomachs with the eternal beef, damper and tea. Their pleased look appeared to indicate success, and in the shade of the awning I found the pros-

trate body of a large dark-coloured kangaroo. It was a female, and, examining it, I recognised it as being a *Macropus robustus*. From the native description I had long suspected the tjikurr to be identical with this species. The male is jet black, while the female is of a dark slate-blue colour with coal-black feet and hands. I do not think that any specimen had previously been brought from Arnhem Land.

Holm had taken up a stand, letting the blacks beat along the steep and broken escarpment of the tableland. The tjikurr female, called *tjugeri* by the natives, had then appeared out of a torn and rugged precipice, landing on a rock where Holm immediately killed it with his gun. This was the only specimen he had actually seen during the day, but encouraged by this piece of luck we decided to have a solid try for the tjikurr on the following day.

About three o'clock the next morning we rose and pulled the sleepy and chattering blacks away from the embers of the dead camp fire. Replenishing the fire, we made tea, and after a hurried meal left Tommy with a revolver to guard the camp against a possible raid from strange tribes. In the company of Jackie, Holm and I groped our way in the starlight towards the top of the tablemountain, which rose to an altitude of probably about a thousand feet above the bed of the river. Day broke as we climbed over the edge and into the broken plateau of the mountain. The morning was bitterly cold, and Jackie lit a grass fire in order to warm his naked body, which shivered with cold.

Our camp was hidden from our sight between the tops of the primeval forest, which were just discernible in the dusky abyss below us. Around us rose the mighty central tableland of Arnhem Land. All around us branches of this mighty plateau ran out towards the lowlands, dropping boldly towards the plains. As the sun rose the bold breaks and precipices of these tablelands lay deeply shadowed, while long rays of the morning sun ran sharply along the wooded and often jagged plateaux of the mountains. Far away in the invisible and endless horizon the smoke of a distant grass fire rose, bending to the morning breeze.

We began to beat for tjikurr in the cool morning, searching the mountain systematically, climbing and crawling to our various stands in the dangerous and precipitous country. The result, however, was disappointing. We only saw a tjugeri running off at a great distance and observed a few rock wallabies, which we did not want.

In the heat of high noon we reached the deep valley which separated the mountain from the main tableland. Having been without a drink for six or eight hours, we were now fairly parched, and, as Jackie promised us water, we climbed down. Enormous and broken rocks overhung the narrow valley. The almost flat bottom of this valley was covered with heavy timber with very straight and fine stems. Numerous pigeons of a species I had never previously seen rose with a peculiar cracking noise from their wings, and disappeared, settling in the holes of the rocky débris. We soon reached a beautiful spring and quenched our fierce thirst.

Close to the fountain I discovered a collection of very peculiar stone buildings. Judging from their relative position these structures had been built over the fire-places of a



Fig. 9.

A STONE BUILDING.

native camp. Each of these structures consisted of flat and narrow sandstone shales from eight to sixteen inches high, placed in a circle about 20 inches wide. The interval between these shales was filled with smaller stones, and débris, which covered the patches between the stones where grass and other plants grew abundantly, testified to the

age of the structures. Jackie explained to me that during certain festivities, which were repeated at intervals of several years, the blacks camped here, and that at these festivals, in which only the male individuals of various tribes participate, great numbers of kangaroos are killed and eaten. The circular stone buildings are erected over the site of the fires, where the kangaroos have been cooked, the smaller cooking stones being finally heaped into the circular stone structures. This was all he could convey to me by means of his scanty store of 'pidgin,' mingled with words from the Warai vocabulary.



Fig. 10.

A STONE BUILDING.

These stone structures, which at a distance somewhat remind one of the circular stone structures of the European stone ages, are thus nothing less than memorials of some of the most supreme moments of these wild aboriginal tribes, permanent memorials which

remind the wandering savage of the great hunting of his tribe in the past. As far as I can see they represent the first attempts at monumental art on the part of aboriginal man, the first expressions of a desire to connect the present with the future.

My blacks, who were both old men and had never seen white men before they were grown up, declared that these memorials had been erected long, long ago—while they were children, they said. In connection with these memorials I should also mention a peculiar custom which I met with in certain families of aboriginals, a custom which perhaps may be considered as a still more primitive germ

of monumental art. When a kangaroo has been killed and cooked, the cooking stones are as a rule arranged in an oblique oval around the dead fire, and these ovals, if undisturbed, would certainly be found *in situ* after many decades and even after the lapse of centuries.

During my wanderings in the mountains and along the valley of the rapid river I repeatedly found these oval piles of stones of the size of a fist, and Jackie, who generally accompanied me, told me their origin and even pointed out to me one or two of his own construction. On the following day I went by myself up to the valley and made two sketches of the peculiar stone structures which are represented here.

I also wanted to secure specimens of the peculiar rock pigeon, which seemed different from almost all pigeons previously found by me. In the tablelands on the Victoria River I had shot a species which in shape and habits of life was similar, and which I subsequently ascertained to be the rare *Petrophassa albipennis*. It is dark with a large white spot in the wings. The species seen by me on the previous day resembled the *Petrophassa albipennis*, but was considerably larger than this species and had rusty red wing feathers. After a very careful search among the rocky débris I found a small flock. Their behaviour reminded one somewhat of ptarmigan, and they ran very cleverly between the stones before they rose. I got one with my first shot. It was blackish brown and on the tail and front part each feather had a lighter coloured spot. The outer primaries were, as I had previously seen, rusty red. This species was most decidedly unknown, and I continued the hunt very keenly. The birds had now scattered and number two was not so easily got as the first one had been. A third escaped among the rocks, after which I was forced to give up and go home. The heat was exceedingly intense, and I was literally drenched with perspiration.

Professor R. Collett has described this new species (*Proceedings of the Zoological Society of London*, May 3, 1898) under the name of *Petrophassa rufipennis*. According to Mathews (*Birds of Australia*), Leichhardt is supposed to have seen this species in his travels, but no specimen

had ever been brought to the notice of the scientific world before mine.



Fig. 11.

Petrophassa rufipennis.

where else, and this species appears to increase in numbers as one goes away from the coast. The various species of quails were also exceedingly numerous, occurring in flocks of hundreds, perhaps even thousands. Now and again I might pass stretches of forest where the quails sprang up from the ground at every step, like a swarm of locusts. Besides these species, the large black kangaroo and the new pigeon, I also met here a couple of birds which were not common in the parts where I had travelled hitherto.

One day, walking along the river, I found a banyan tree of a species which bears a very small fig, about the size of a raspberry. A little flock of pigeons lived in this tree, and having stalked them and quietly observed them for some time, I realised that the species was unknown to me. I quickly secured two specimens and, as I supposed at the time, this species proved to be unknown to science. Professor R. Collett has (*loc. cit.*) described it under the name of *Ptilopus alligator*. It is very beautiful. Its head is white, the lower part of the neck and breast is almost brick red, wings and body being slate blue with a black band across the chest, and the tail of a dark slate colour with a white tip. I never met this bird in any other locality. It might have escaped me, being very

The fauna of this region also presented other variations from that which is generally found closer to the coast. The large bronze-wing pigeon (*Phaps chalcoptera*) was more numerous in the table-land than any-

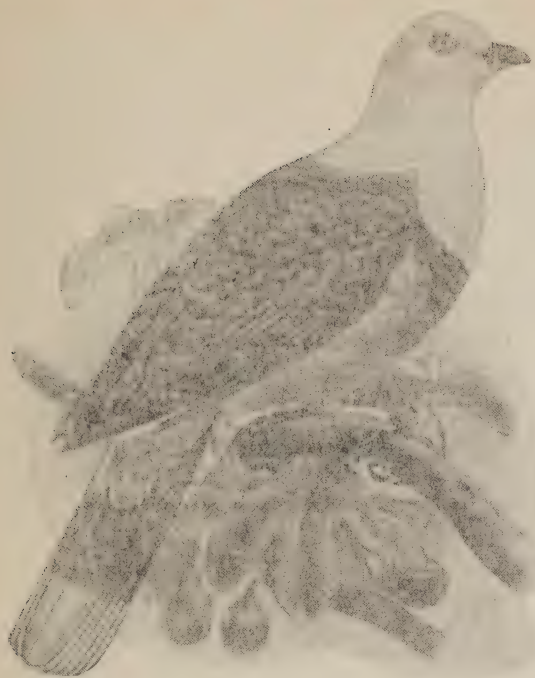


Fig. 12.

Ptilopus Alligator.

rare, but if I had ever met with it anywhere else I should certainly not have overlooked so very striking a bird. The blacks declared that this pigeon always kept to this peculiar banyan species, feeding on the minute figs.

A small parrot, also new to science* and designated *Psephotus dissimilis*, was fairly common. I had, however, already found it

on the Mary River, and subsequent experience proved it to be distributed over all the interior parts of Arnhem Land visited by me. Along the coast I do not think it occurs.

The rock phalanger occurred in the caves and boulder heaps of the tableland. Its droppings were common, and Holm once saw a specimen, without, however, being able to secure it. Rock wallabies also were to be seen. *Petrogale brachyotis* was plentiful, but the smaller species, the *P. concinna*, appeared to be scarce or lacking. Here and there under the rocks dwelt echidnae, and droves of the large red kangaroo appeared everywhere in the lower ridges. They were very wild, always making off at a great distance.

Our camp life during this period was not particularly enjoyable. A camp where one of two companions is

* Described by Collett in the abovementioned paper of May 3, 1898.

always ill is not a cheerful one. If I got well, Holm fell sick, and *vice versa*. Occasionally we had good days, when we were both well and hunted and fished together along the little river. The scenery of this river is very beautiful. The river-bed drops sharply down the valley among rocky surroundings. In places only a tiny stream gurgled over the polished rocky bed, which contained a great number of large 'giant cauldrons.' Every now and again the river formed deep, dark rock pools in which tea-trees and screw-palms were reflected and in which shoals of fish played in the crystal water. It was fine to wander here when the sun was low in the west and the quiet valley lay in the cool deep shadow of the hill. The water would run with soft plashing, the air was full of the gentle cooing of small pigeons, and kangaroos would sometimes come and drink, while we sat on the rocks flicking the greedy fishes ashore. One evening a large iguana rose through the dark waters of the pool close to where I was sitting, and I shot it between the eyes with my revolver, and succeeded in passing my fishing line round it, and so towing it ashore.

On arriving at our camp at dusk we would drive the horses in, give them salt, and make much of these faithful nags who had accompanied us so long. And when the tinkle of the horsebells filled the forest night, and the blacks danced round the camp fire in mere joy at a full stomach, we would light our pipes and lie down on our bark beds with a feeling of comfort, perhaps greater than we should ever have felt in civilised life. But, alas, the fever was always with us.

Upon arriving in camp one night we found that a relative of our men had come from further east and had camped alongside us. The man as well as his wife, a young and uncommonly beautiful girl, had brought large quantities of wild honey, which they had collected on the march and which they stored by means of a fibre rope that had been saturated in it. Our men were now ceremoniously invited by their relatives to partake of the feast. A trough was improvised from a piece of new bark, the ends being fastened together with grass lashings. A little water was poured into this trough, and bit by bit the



'GIANT'S CAULDRON' IN S. ALLIGATOR RIVER.



BLUE WATER-LILIES AND MELALEUCA TREES, S. ALLIGATOR RIVER.

fibre rope was washed out, the honey dissolving into the water. Each of the guests now made a thick brush from fibre—about the size of a small painter's brush—and, dipping this brush into the honey water, licked away with great relish. This was repeated until the trough was empty.

The next day I persuaded all the blacks to look for 'ngart' (the large turtle) in the river pools, but they were unsuccessful and declared that there were no 'ngart' there. In the Mary River, however, this turtle was said to be numerous. So we decided to join forces and march to the Mary River.

The following day Holm had a touch of fever, but nevertheless we broke camp and rode west again through the tablelands, following the northern slope. High up under the break of the plateau we met an old native woman and a small boy. They belonged to a large party of blacks, and I bade the old woman advise them all to follow me to the Mary and hunt the 'ngart.' In the afternoon we descended from the mountains and camped in a fine little valley at a deep and still *pandanus* creek. All the blacks very soon came in, camping in a dry watercourse about a hundred yards off our camp. They brought a large kangaroo which they had speared and dismembered in the hills, and far into the night they feasted on the meat.

During the night the natives were very frightened, insisting that they heard hostile blacks, belonging to the Agigondin tribe, who were on the march towards the Eureka. The hill slope above us appeared to be full of strange noises. It might have been kangaroos. I had now no dog to warn us, and Holm was asleep under a tree, shaking with fever. I confess that I felt uneasy as I sat alone by the fire, but finally I lay down—under the open sky, as mosquitoes were entirely absent. Strangely enough, a few drops of rain fell, but as the fire died down I fell asleep.

The next day, when looking for the horses, I missed my old saddle-horse. He proved to have fallen into the creek where, being hobbled, he had been forced to stay all night. We succeeded in pulling him out, but had to let him rest for another day. After that we saddled and

rode west, passing through interminable stony lands covered with thin forest. Now and again we crossed creeks, where the soil was better and the vegetation more luxuriant, but the stony and barren nature of the land predominated. Late in the afternoon we struck the old track of our eastward ride and, following this, we crossed the Mary, finally settling in our old camp. Holm was still unwell. His eyes also had weakened, becoming red and swollen, probably the result of the strong glare of the sun. Nevertheless he kept his end up and insisted on our staying, in order to hunt the large turtles.

Tommy and Jackie were quite silly that night with superstitious fears. We had rigged up our awning, had seen to Holm's comfort, and a large camp fire of solid eucalyptus boles crackled at the foot of a tree, the flames searing the resinous stem. Suddenly Tommy let out a miserable yelp. "I die," he cried. Upon my inquiring as to the cause of his death, he reeled out a plaintive account, the essence of which was as follows. About a year ago—he could not tell the exact date—at the foot of this tree he had performed one of the smaller functions for which the civilised man's closet is intended, and now he would surely die, as our fire was burning his excreta. It is a very common belief among the blacks that great ills will befall them if leavings from their meals, their 'clothes,' their blood, their urine or excrement fall into the hands of alien or hostile persons, or are treated in a way not foreseen. For this reason they are very careful not to leave anything behind, and they take special steps to destroy all traces of their excreta. The urine is generally cast at the foot of a tree and naturally its traces are thus easily obliterated. But in the case of the excrement the matter becomes of course more complicated, and their habitual proceeding I was never able to ascertain. But the excrement is certainly disposed of in some way, and I cannot remember ever to have seen the excrement of a native.

As we were sitting round the fire, the blacks suddenly began to talk of 'devil-devil' and hostile blacks. They insisted that devils or hostile natives were prowling around us. As we listened, I became aware of unusual pattering

sounds between the camp and the river; but they might easily have been caused by bandicoots or kangaroos. The blacks, however, talked among themselves in great excitement, exhorted me to shoot, and suddenly Tommy jumped up, laid a spear in his woomera and threw it with all his force. The spear flashed out of the circle of light, landing with a rattle in the suspected quarter. To soothe the blacks I also fired my revolver in the same direction. A great shout of alarm rose from the native camp some way off. Shouted questions passed for some time between the two camps, and only when the matter had been thrashed out in all its detail were the excited minds of the blacks calmed. Tommy declared that after this treatment no devil or malevolent native would dare to approach.

Then he began telling me how he had once met the devil himself. With his relatives he was hunting far east in the tablelands, when some affair obliged him to go to the Eureka, and he had to go alone. He walked and walked all day. At night he arrived at a creek between some small hills. He dug yams, cooked and ate them. Being tired he lay down at his fire, immediately falling asleep. In the night he half woke, fancying he heard a cooee; but he paid no heed to it. Then he heard the cooee again, and he rose on his elbow. Suddenly he saw the devil himself sitting on the opposite side of the fire, a little man with a large head, thick body, short legs and enormous owl's eyes, which glowered at him. Grabbing a firebrand he flung it in the face of the monster, which immediately disappeared in the darkness. From the hillside he could then hear a fine cooee almost like whistling, and whistling answers came from every hill and hillock. Then he legged it and ran as hard as he could go until the day broke and he arrived at the Eureka.

The evening talks with the blacks were always amusing and these children of nature speak openly on most matters. Discretion is unknown, and all happenings which pertain to themselves or others, all family affairs, even the most intimate, are an open book for anyone to read. That a man beats his wife, that a wife is

unfaithful to her husband, in short all sorts of scandal which the civilised man more or less considers the property of the family or household, all this is common property among these people of the open air, and subjected to common criticism and comment.

Tommy's and Jackie's tongues ran continually. They told and they asked, and asking, especially on the subject of the white man's country, questioned, of course, just as naïvely and strangely as a cultured European probably would when questioning a native from another planet. Heaven knows what questions they did not ask ! I can remember two which, whatever blacks we stayed with, were invariably put to us. One was : " Why did the white men cut off their beards ? " In the opinion of these people the beard is a glorious sign of manhood, and no native would dream of touching it with stone, knife or fire. A man without a beard is in their opinion only a boy. Taking this into account I had let my beard grow for a long time, producing enough hair on my face to satisfy black etiquette among my present companions. Holm, however, who had recently shaved, was considered as only a boy.

The other came from another fixed native belief that a man without a wife is a miserable wretch. Against their pity in this respect we had, I regret to say, no protection, and when they asked us if we had no wives in the land of the whites we had to acknowledge the shameful fact that we were bachelors. We attempted a weak palliation by drawing attention to the fact that we both had " girls who were promised to us." But this only elicited a " poor fellow." And this " poor fellow " certainly was no reflection upon the girls in our homeland ; it was indeed uttered in commiseration with us who were devoid of the indispensable article which the sons of the forest call a woman, but which in the land of the whites is called a wife.

When I asked Jackie if he was married, I got an answer which very well illustrated the looseness of the marriage tie in these parts. He had had a woman, he said, but he had tired of her. " Where is she now ? " I asked. " Me givit Tommy."

I then turned to Tommy, asking where his better half

was now. "Lend'im Billy." I said, "Which Billy?" "Billy brother," he answered. Hereupon I could no longer restrain my amusement, at which Tommy took some offence and justified himself in the following words: "Billy brother no woman, me lend 'im." This proof of fair brotherhood was in full accordance with the etiquette of these savages, and it sent Holm into hysterics.

The next morning I brought the horses in, tended Holm as well as I could, and after breakfast took Tommy and Jackie over to the native camp. The blacks sat lazily around the fires. The meat from the large kangaroo, killed in the tableland, had now for some time been finished, but they appeared to have accumulated enough nourishment to permit them to take it easy. The men repaired their spears, and a woman was tending her husband's tomahawk, which consisted of an old piece of iron fixed in a doubled bough. From the basket of an old woman protruded a couple of the sticks which are employed for making fire. I had only a few matches left and, taking the sticks, I drilled out the necessary sparks, lighting my pipe with them, an operation which highly surprised and amused the blacks.

Then we all went to the river to hunt the 'ngart.' A few spears were brought for the purpose of spearing fish, but no implements were employed to hunt the turtles. The oldest of the men now took command. We went up the river until we came to some long and inky pools where the little river flowed quite slowly, and countless screw-palms surrounded the deep, black water. At one of these pools the men now separated into two parties each of three or four; but on attempting to enter the water they declared it to be still too cold. They had to wait for some time, and this interlude was spent in a pleasant consumption of tobacco. After some time I exhorted them to begin, and to this they now consented.

The two parties of men now went to opposite ends of the pool and, entering the water, let out a simultaneous yell, diving towards one another. Their obvious intention was to chase the turtles towards one another, in a way to 'beat the water' for turtles. The black bodies disappeared. The last I saw of them was their white foot-

soles. Then these also disappeared. The water of the pool became still and mirror-like again. That human beings could remain under water for so long a time as these blacks did surprised me greatly. I thought they would never reappear. Now and again a boil would appear on the surface, and part of an arm or a leg would be protruded. Finally, after a remarkably long time, the heads of all the blacks appeared almost simultaneously in the middle of the pool. They blew like dolphins, laughing and roaring, and one of them waved a small turtle by its hind leg. Swimming over to me he threw it ashore, and I secured it in my bag.

A larger turtle had escaped up the pool, and three or four men swam up in order to chase it out again from its hole in the bank. The black bodies dived again simultaneously, and after some time they reappeared, all except one. No turtle. Under the opposite shore, however, great whirls in the water showed that a violent contest was going on below the surface, and after some time the last native appeared holding a turtle more than a foot long. He seemed to me to have been under water for several minutes, and he was a good deal out of breath when he crawled ashore shaking with cold, and his teeth chattering. In spite of the sunshine and the temperature being at least twenty-five to thirty degrees centigrade in the shade, these men appeared to suffer as much from cold as would a man in Europe after a bath on a cold autumn morning, and they loudly implored me to light a fire. The bamboo jungle, the grass and the dense vegetation were dry as tinder, and a match set the whole jungle aflame in a moment.

The blacks literally rushed to the fire. They jumped about in it, turning and twisting, walking in among burning rubbish and grass heaps; in short they warmed themselves in a way which, according to my notions, was more suitable for the purpose of roasting. Then pipes were lit, and the spirits of these fickle beings rose again, while the flames raged in the jungle with increasing ferocity. The bamboos were full of dry creepers, and the flames ran up them like rockets, while the hollow stems of the bamboos burst with a loud cracking as of gunshots.

Here and there the large canes began to fall. One of them hit Tommy over the back, and we judged it was time to depart. Then we went on to another pool, and having 'beaten' it again lit the jungle for the sake of warmth. In this way we worked down the river until high moon, finishing our hunt with five turtles in the bag.

The turtles belonged to two different species. One of them, named 'bamdak,' had previously been secured by me on the Daly. This species (*Emydura Kreftii*) grows to a length of about fourteen inches and is easily recognised, having an orange red stripe over the eye. The other species, 'ngart,' proved to be the *Elseya dentata*. It grows to a length of about twenty inches, and I have never met with it west of the Mary River. According to the blacks it is common further east and probably occurs in most rivers, at all events in the smaller ones. It is very difficult to catch. This turtle is a plant-eater and forages on the shore, where the fallen fruits of the water screw-palm (*Pandanus aquaticus*) appeared to be their staple food. This species of screw-palm is very much like the common species (*Pandanus odoratissimus*), being distinguished from it mainly by the much smaller size of the units of the composite fruit.

The blacks now obtained their well-deserved reward, *i.e.* a paper which, upon presentation in the store at Union town—two days' march off—would yield them fifty pounds of flour and half a pound of tobacco.

Holm was still suffering from fever and sore eyes, and, as there did not appear to me much more to be done along the river, we rode on to the Eureka, where in the Chinese store we bought a few tinned things, besides a little Chinese spirit in order to celebrate the fact that it was St. John's Day. In the evening we reached our old camp where a month ago we had been so lucky with the wogoit. Numerous kangaroos ran heavily over the little plain among the low granite hillocks, and the horses, after being hobbled, made for their well-known grazing grounds.

By the light of the new moon we ate our hurriedly prepared evening meal and very soon went to sleep, tired by our long ride. Holm felt much better in the evening

and thought himself able to stand a few days' delay, while we attempted to get some more wogoit.

In the early morning a great number of blacks arrived, being on the march to the corrobborree at the Eureka, and among these was also Jackie, my old wogoit hunter. He agreed to go with me for this one day, having to appear at the Eureka in the evening. We went out and succeeded in capturing a wogoit.

Next morning when packing the horses I felt almost melancholy at leaving this spot. I knew it would be the last time I saw the granite with its wild boulder heaps where I had spent so many a successful day. As I rode over a small ridge during the forenoon I saw far away in the east the blue outline of the first hills in the great tableland. And above these blue and distant hills rose the hazy smoke of grass fires which we had lit, grass fires which still raged in the enormous wilderness. I should never see this land again, and who knew when a white man would again attempt to cross its desolate mountains, or hunt the 'tjikurr' and the wogoit in its deep caves and caverns?

And as the dense forest of the ridge finally shut off the view, I seemed to hear, in my own breast, a faint sound as of a cave animal stepping on to the sounding granite; it was an echo from days which had passed and could never return.

CHAPTER XIII

ON THE KATHERINE RIVER

At the Union there was practically no grass for the horses, but about three miles off we found a peaceful little valley with sweet water and luscious green grass. In this quiet spot we camped while preparing for another expedition. Our collections were kindly stored by Mr. Castle at the Union store, and Holm started to preserve the turtles, which were still alive in our pack bags, and indeed were now a nuisance, stirring at night and disturbing our sleep.

Holm was now quite well again, and, probably to counterbalance this, I fell sick myself. I was seized with fever and violent stomach troubles. It almost looked as if I was in for a return of the Mount Shoebridge attack. However, I stubbornly overcame the illness, lying on my back under the awning. We had, indeed, got used to hard sick-beds of late. And they had other unusual features, too. One day, after we had obtained some mails, I was lying on my back and reading a paper from home, holding it uplifted before me. Suddenly a snake came gliding from under the paper, ran over my chest and passed over my right shoulder. Its tail just touched my cheek as it passed. I rose on my elbow, and, half turning, espied the snake lying a little distance behind my bed. Its head was raised a little and a curious glitter played over its eyes. I suppose the reptile was just as surprised as I was. A long stiff strip of bark lay close to hand, and taking it up cautiously I gave the snake a smart clip over the neck, which put it to sleep for ever. Like most Australian snakes it was a poisonous little beast.

I recovered after a few days, mainly, I think, because Holm got some goat's milk and eggs for me at the Union. Then we broke camp and set our course south, heading for the Katherine River.

At Pine Creek we counted on buying some beef, but, being disappointed in this, we set off without the meat. We had a little bacon and an abundance of flour, which would surely pull us through. Now and again we shot squatter pigeons, which strode in front of us while we rode along during the day.

It took us four days and three night camps to reach the Katherine, days which passed without much adventure. Every day was occupied in a monotonous ride through low undulating ridges covered with tall and open eucalyptus forests. Occasionally we crossed a deep river bed. Night after night was spent at the bright camp fire, sleeping the heavy sleep of the tired rider. Every morning we rose and rode off as soon as the red disc of the sun sprang into view among the stems of the forest.

Water was sometimes very scarce, and at our last night camp we had to search for a long time, and it was pitch dark when finally we found a small pool. It was in fact so dark that we had to crawl on our hands and knees in order to find firewood and start a fire, the light of which permitted us to unsaddle the horses. Animal and bird life was not plentiful. A kangaroo track was occasionally seen, a dingo might flee before us in the day or be heard howling at night, flocks of parrots and cockatoos would be heard screeching in places where the trees of the forest were in blossom. The rare *Psephotus dissimilis*, mentioned in the previous chapter, was occasionally seen in small flocks. In a little plain at a waterhole which we passed we saw a mighty jabiru (*Mycteria australis*) stalking along, a cormorant sat in the waterhole, and from the plain rose an enormous flock of the 'gala,' the rosy-coloured cockatoo, a living rose-coloured cloud of birds that settled screeching in the gum trees. Unfortunately they were too shy to allow us to obtain a number of them for food.

When after breaking camp on the fourth morning we had ridden a couple of miles a welcome change broke the monotony of our travel. I quote from my journal:—

“9th of July, 1895.

“As we were riding in the early morning and were just crossing some dry and desolate ridges, Holm suddenly said, ‘Emu!’ About forty yards off our trail one of

these stately birds sat stolidly contemplating us. Sliding off my horse I slipped a cartridge into my rifle barrel and let fly. The bullet, however, only passed through the profuse back and tail feathers of the bird, rumpling them considerably. In a momentary fit of panic the bird set off at a swinging trot, but from curiosity it stopped after a short interval. Following on horseback, I got within a hundred yards, and, the bird passing me at a slow walk, I rode up and taking a steady rest in a forked tree fired from the horse. At the impact of the bullet the bird fell prone, dead as a herring. It was a fine creature. Stooping from my saddle I could just hoist it on to my horse and so carried this trophy back to the halt, where we very quickly skinned it, and again rode on. In the stomach of the bird I found only a few dry berries the size of peppercorns, besides quite a lot of charcoal."

At the Katherine River lived a telegraph operator, a policeman and a storekeeper, each in his own house. None of them was married, and they all spent their days in the utter loneliness which is peculiar to the Australian bush. Off and on some cattle drover would pass by, mails would occasionally arrive, and sometimes a party of prospectors would pass on their way to the West Australian goldfields. The trail from Queensland to the Kimberley district and further to the Murchison and other goldfields passed the Katherine.

A couple of miles down the river there was an old bark humpy, originally built as a stable for a batch of racehorses which had once been brought through from Queensland. This old stable, which was owned by the storekeeper, was recommended to me as a suitable storing place for my collections. Not wishing to stay among the white men, I accepted the offer of occupying the old stable. We made ourselves as comfortable as possible. In the shed we had our museum, and we ate and slept outside on the ground. Why should we sleep under a roof? Had we not seen the moon and the stars looking down on our camp month after month? But the nights were cold and we had to unfold our awning and place it over our thin blankets at night. To oversleep was out of the question. At sunrise the cold was always sure to wake one

up. One morning I was even awakened by a 'shepherd's companion' (*Sauloprocta motacilloides*), which was sitting on my chest, singing its morning song. This bird was indeed always about us, and finally became so tame that we could almost touch it.

We engaged an old native and his wife to fetch wood and water and to assist us in hunting specimens. A mob of hungry 'relatives' generally followed in their wake. But I did not by any means object to this. They would always bring in something in the way of lizards, rats and other small fry. In the evening the blacks always departed in order to join the main tribe, which was camped some way above us on the river. But in the heat of the day they would sleep around my camp fire. Or if they did not sleep they would employ the time in hunting each other's scalps for lice, which were promptly eaten by the hunter, being considered quite a delicacy!

Mammals were not particularly numerous. The large red kangaroo occurred in big but exceedingly shy herds. The river kangaroo was fairly numerous by the river; but the animals were so wild that several attempts on my part to get hold of one were vain. Smaller mammals were secured by us in limited numbers. The common opossum was taken from hollow trees on one or two occasions. And it appeared to be larger here than further north.

Conilurus hirsutus, the 'nundjala' from Hermit Hill, was also taken, and the common native cat was abundant further up the river, where the land was stony and large boulders sometimes rose in the level forest. The small brown rodents which I found so numerous in the central tableland were plentiful here on the Katherine. The Agoguila tribe called them 'kondai.' These rats had their burrows everywhere around our shed. They dug up the sand around our beddings at night and stole our food as much as they could. We constantly set traps for them, and whenever during the night Holm heard a trap go down with a thump he would have a triumphant and malicious laugh at the expense of the little thieves.

Parrots were plentiful, especially the nymph, the



OLD WOMAN, KATHERINE RIVER.



YOUNG GIRL, KATHERINE RIVER.

‘cockatoo parakeet’ (*Nymphicus Novae Hollandiae*). We had met the bird before on a few occasions, but always singly. Here at the Katherine they were very common, occurring in flocks. I quote an extract from my journal :

“11th July, 1895.

“Soon after this I heard the melodious whistle from a flock of *Nymphicus*. I stalked them and shot one. The flock rose, and having circled a short time settled one by one in a dried tree, spreading their beautiful tails and erecting their fine crests. I stalked within safe range and fired at a small flock which was sitting on a single branch, securing several. Their slaty-grey coats harmonised beautifully with the sober colours of the earth, the orange spot on their cheeks forming a fine contrast. Their sulphur-yellow crests were erect as they died. One had only a broken wing and its plaintive whistle was answered by others of the flock. These two or three individuals settled close to me in a tree, and I had not the heart to shoot the faithful creatures though we needed food.”

One day when approaching the storekeeper’s place I came across some large rocks in the forest. On the face of these rocks I found a good many ochre drawings executed by the natives. There were clumsy drawings of men and kangaroos, the usual stencilled pictures of hands, etc. I found also, however, some contour drawings of fishes very well done, so well, indeed, that I could easily recognise the common squirting fish (*Toxotes jaculator*), which was very often captured by the blacks. Perhaps the reason for the faithfulness of these drawings was that the fish’s outline had been traced on the rock.

The blacks here were not to be trusted, and quite lately there had been some trouble. Mr. Burt, the police officer, who was a hard-headed Englishman of the right sort, had had his hands full. I sometimes went up and had a talk with him at night, and he told me quite a lot. The North Australian police always have black assistants or trackers, and these assistants are as a rule natives from other far-off regions of the Continent. Mr. Burt had had a boy of this kind, acting as a horseboy and generally assisting him. His name had been Bob, and he was a

Queensland native, big, strong and very savage towards the Katherine blacks, from whom he had extorted a young woman. The blacks hated him thoroughly, making several attempts on his life. But he got the better of them, and on one occasion he had almost cut the leg off one of his antagonists with a knife. One day he went bandicoot hunting with his wife. In the vicinity of a rock they made a fire and roasted their spoil. While they were sitting there some of his wife's tribesmen surrounded the place and began throwing spears from all quarters. Finally they succeeded in hitting him with a number of spears. Thinking that he had been punished enough, his enemies carried him to the vicinity of the police station. Just at the back of the house they hoisted him, still alive, on to a boulder heap, but during the night another tribesman could not resist the temptation and went and chopped his head off with a tomahawk. His wife had been an accomplice to the whole ambush, her tribesmen having forced her to take her husband out on the fatal bandicoot hunt. Mr. Burt had then had to capture the culprits and take them down to Pine Creek and Port Darwin, where the Court trial had taken place only recently.

One morning after the capture of the murderers the old father of one of these arrived at Burt's house, asking the house boy to go in and wake Mr. Burt, as he wanted speech with him. Mr. Burt rose, and as he stepped on to the verandah the old man sent a barbed spear at him. Burt side-stepped, evading the spear, and the old man fled, *ventre à terre*, while Burt as well as his boy ran in for their fire-arms. An exciting chase now ensued. The black police boy was the first to overtake the old man, who had crossed the Katherine and entrenched himself on top of the steep opposite bank. From this point of vantage he held the black boy at bay with his spears, the boy not daring to close for fear of being speared, and being unable with his revolver shots to hit the old man, who kept ducking on top of the high bank. As soon as Burt arrived with a rifle the old man ran away into the forest and he had not appeared again. This had happened a few weeks ago. Conditions were thus not quite safe here.

Nor was this the only place where the blacks had been awkward during this dry season. While we had been in the tablelands and at the sources of the Mary ugly things had happened in several places in Arnhem Land. In Melville Island a couple of buffalo hunters had been attacked and wounded by the natives, and on the Victoria there had been quite serious events. When Stevens and Crawford, on our expedition to the Victoria, had left the stores at the 'depot,' these stores had been fetched by two carters from the Victoria Downs station. On their way up Mr. Ligar and Mr. Mulligan, the two men who were doing this transport business, had both been attacked by the natives. Ligar got a spear through the face and one through the lungs. Mulligan was speared in the leg. After fearful sufferings they managed to reach the Auvergne cattle station on the Baines River, and from here they were conveyed to Palmerston. Ligar, remarkably enough, recovered, but Mulligan was crippled for life. Ligar passed the Katherine en route for the Victoria, and I met him at the storekeeper's place.

Similar risks were taken by many of the pioneers in this North Australian wilderness. They were by no means weaklings, these sun-browned and bearded horsemen who piloted their cattle droves among the savage natives. The Australian bushman is of a virile type. His face is bearded up to the eyes, his arms and chest are hairy like those of an orang-outang, and he is bow-legged from much riding. His actions are quick and determined.

In those days, at any rate, he was often not over-scrupulous as to the means employed to gain his ends. Under partly civilised conditions and within the reach of the police, he was, like all other Colonials in similar circumstances, too sensible to do things which might bring him into trouble. But in the depths of the wilderness, revolver and rifle were carried openly, and indeed this was not to be wondered at. For one thing, a white man was really never quite sure of his life in those limitless forests, and the instinct of self-defence naturally and justifiably asserted itself. The rough life, moreover, was also apt to harden and roughen the ordinary white man, and it was not sur-

prising that many of the Australian bushmen were a rough lot, inasmuch as many of them had been brought up under conditions which were very little suited to the organisation of life according to the standards of civilised communities.

A bushman in Northern Australia without a black woman was a very rare exception. Generally a black girl in men's clothes accompanied him. She was his mistress, his groom, his cook and his right hand. She kept him posted as to the moods and plans of her brethren in the bush, and these black girls were often very devoted to their masters. If she got lost or abducted, the bushman would scour the bush to recover her, and many a native has been shot and, if it was too close to 'civilisation,' has been immediately burnt to ashes, because he ran away with a white man's 'lubra.'

Little girls and boys were often forcibly taken from distant tribes in order to be educated as mistresses and horseboys, and cruelties of this kind were certainly often the main reason for most of the murders and other outrages committed by the blacks of the northern forests. When a murder or an ambushade was reported, one might almost always suspect that there was or had been an affair about women at the bottom of it. Very often, of course, vengeance descended on another than the actual culprit. The individual suffered for the crimes of the race.

Still, the blacks were often greatly wronged. I have seen them beaten, kicked, and beaten again, for often quite trivial offences. No sensible man would punish even a dog in the vicious way I have seen the natives punished by bushmen. Close to a township and a store a native one starlit night breathlessly invoked my assistance against a white man, who was in the act of raping a girl ten or eleven years old. Hurriedly following him, I arrived in the nick of time to prevent the actual perpetration of the crime. I shall not enter upon the details of this nocturnal drama. Be it sufficient to say that the berserk rage of my ancestors came upon me, and I smote the ruffian with my bare fists until every spark of life appeared to have left his miserable carcase. To my

great regret the wretch survived, but I am happily convinced that he will remember that night as long as he lives.

A book might be written on all the instances of savage cruelty and licentious brutality on the part of the whites which I have witnessed in this northern wilderness. But such writing would serve no useful purpose. These things are bound to happen. Men who live their whole life under practically lawless conditions and in constant dangers and privations by force of circumstances tend to become wild and brutal. The species reverts to the aboriginal type. This phenomenon must be taken into account, and I must say that, on the whole, I am surprised that the white men of the bush were not worse than they actually were. In many of them one found considerable reading, and a strong propensity for philosophical speculations coupled with a certain gift of poetry. They have indeed a regular poetry of their own, existing in manuscript on scraps of paper and passed on from man to man—a poetry read and recited and sung to melancholy tunes, when old comrades meet over a glass of bad whisky.

The bushman is a good comrade as a rule, very open and straightforward. Sometimes I have spent perhaps a couple of days in the company of a man whom I had never met before in my life, and during those days it has often happened that I have had to listen to inconceivable confidences. The man would persist in introducing me to the whole of his former life, his family affairs, his luck and his disasters, his faults and his virtues, with exactly the same kind of candour that is peculiar to the black denizens of these forests. And this frankness of the bushman is obviously caused by the immense feeling of loneliness which oppresses men who lead a very solitary life. In the immediate joy of meeting human beings of their own race, these men, on the first impulse, speak more openly than they would do on closer consideration.

After reading these short remarks on the morals and manners of the white pioneer of Australia, let those who wish to do so sit in judgment upon him. I will not do it. For my life under the same conditions has taught me to sympathise with him and to commiserate him, as being

a sacrifice in the cause of progress. He was the first to ride the trails of the wilderness. He found the rich grasslands; he brought the knowledge of gold and precious metals from the vast forests. Everywhere in the development of Australia this strong, dry and sunburnt type of man has been the pioneer. Where in southern parts of the Continent the wheat is billowing to the breeze, his eyes have been burnt by staring at the glaring dry grass of the plains. Where artesian wells now spring he succumbed to the heat of the sun and to thirst. And where immense herds of cattle now graze, the soil has long ago been saturated with his blood, and there his bones have been bleached by sun and wind. And in the south the typical bushman of the early days of the Colonies has long been disappearing.

But in the north, where the new trails were still in the making, where culture and wilderness were still struggling together, there he was still at his work. He is the sacrifice which the white race must invariably offer in order to gain new fields for its enterprise. And the future Colonist who, under happier conditions, may dwell in regions where the bushman's tracks have been obliterated long ago, and where his bones have long been rotting, will in my opinion be better occupied in recognising the sufferings and privations of his fore-runner than in condemning his misdeeds.

Having stayed some time in my present camp I came to the conclusion that the locality offered very little which was new to me, and further, the blacks were lazy and not very suitable for my work. I therefore decided to go up the Katherine until I reached the mountains, and then to study the fauna of the hilly parts. The night before my intended departure I walked up to the storekeeper's place to buy a few necessities. Besides the storekeeper the only white man present was a bushman belonging to the Victoria Downs station, and now having a holiday. I mentioned to them my intention of leaving in the morning.

While going home somewhat after sunset I was suddenly seized with a peculiar uneasiness, a feeling that something was going to happen. This feeling was perhaps

to some extent due to my discovering that some unknown blacks had camped on the northern side of the river a little above our camp. I saw their fire through the timber. When reaching camp and even after going to bed, I had not got rid of this queer feeling. I quote from my journal :—

“ I read a little in bed and then snuggled down under the blanket, but could not fall asleep. Holm was dozing, when suddenly I heard somebody cough, close to the camp. I asked Holm if he had heard the noise, and we both agreed that the sound was probably due to cattle, which sometimes pass the camp on their way to drink in the river. I lay down once more. After some time I heard the same cough again. It sounded as if somebody with a cold was trying to stifle his cough. I was now satisfied that somebody was prowling about the camp, and I kept perfectly quiet. After a while I heard a match being struck in the shed, and saw the light through the slits in the bark wall. Suddenly the match was thrown over a partition wall and into the straw which covered the floor of the outer and open room of the shed. The match lay burning on the floor, and the straw immediately caught fire. I picked up my revolver and slipping along the wall I ran suddenly round the doorpost, ready to shoot. The straw on the floor was burning quietly, and I stamped out the fire. A soft rustle was audible behind the partition. I threatened to shoot. No answer. Then I shouted to Holm to cover the side door, as blacks must be about. Putting two or three bullets through various parts of the bark wall, I ran round to get a chance at the intruder, as he escaped through the sketchy back wall of the shed. Somebody broke through, and I saw a shadow-like form rushing along among the trees. The darkness gave me no chance, but I emptied the chambers of my revolver at the figure, which decamped in a great hurry. After I had loaded my revolver again we searched the various compartments of the shed, but the thick straw on the floor showed no tracks. We sat watching for some time, being naturally on the alert, and Holm fired his gun once or twice at stumps, believing them to be prowlers of the night. Holm, however, got very sleepy and I took the

watch from two to six o'clock. After sunrise I then got some sleep."

During the following day the blacks assisted us in searching the surroundings of the shed for tracks. No tracks from blacks were found, however. But we found the plain imprints of the feet of a stranger—a white man. His tracks were smaller than Holm's or mine, and he had walked on the sides of his feet, a sure sign of the bushman. We followed the track to the storekeeper's place; we measured it, and found plenty of the same tracks about the houses of the settlement. So we knew very well to what person the tracks belonged, though that part of the business does not matter now. Probably the attempt to fire the shed was made in order that we might be accused of having carelessly burnt down the place and that a claim for some pounds for damages might be made. Whatever was at the back of it, the attempt failed, and none of the parties concerned ever mentioned the subject.

The next day we broke camp and rode up the river, finally camping at Maudie's Creek, a small watercourse which joins the Katherine from the south. Here mountains appeared, and travelling became less easy. We spent a week here, lonely and undisturbed. The river flowed in long silent pools, where long-nosed crocodiles basked on the trunks of fallen trees and countless turtles darted wildly into the water upon the approach of man. The species was the 'bamdak' (*Emydura Kreftii*), also found in the Mary River. Walking one day along one of the silent pools I was lucky enough to shoot a specimen of the gigantic goliath heron, the only specimen I saw in Arnhem Land.

The river was surrounded by mountains and ridges covered with a thin forest and exhibiting a barren and stony soil. Rapacious birds of many species were very numerous, especially in the vicinity of the river. Now and again we met flocks of black cockatoos which fled before the intruder, uttering their peculiar and melancholy notes. And along the peaceful river, where the fierce sunshine glittered on the leaves of enormous trees, hundreds of pigeons were cooing, and the little



A STRETCH ON MAUDIE'S CREEK.



MELALEUCA TREES AT THE MOUTH OF MAUDIE'S CREEK.

painted finches so numerous in Australia occurred in great numbers.

The appearance of the landscape here was quite different from that of the more northern regions of Arnhem Land. It reminded one more of the districts along the Victoria River. It was quite easy to see that we had moved to the south. The bamboo, for instance, had totally disappeared, but whether its occurrence ceases at about this latitude I am not certain. On the Victoria, at least, I saw no bamboos, nor can I remember noticing any between Pine Creek and the Katherine. This lack of bamboos also showed itself in the native weapons. Thus on the Katherine I never saw spearshafts made from bamboo. The spears manufactured by the local blacks were all made from a peculiarly slender tree, named 'lancewood' by the Colonists.

Bird species, which in the north were rare or absent, were frequently seen here. The Nymph parakeet, which in the north was very scarce, occurred here in large numbers. Many species of hawks and falcons were met here much more commonly than I had seen them further north. Some honeysuckers were new to me, and I also found pigeon species which are characteristic of the inland regions of Australia. For instance, *Phaps histrionica* only exceptionally visits Arnhem Land in large migrating flocks, but on the Katherine it was a regular feature. A bushman at the Katherine also told me that he had seen a specimen of the common Australian 'magpie' (*Gymnorhina tibicen*), a bird peculiar to distant southern parts of the Continent.

It was very pleasant to dwell in these surroundings and to wander in undisturbed solitude through the thin forests and quiet mountain valleys, and through the deep waterless creek beds, watching the birds and animals. Nevertheless I considered it my duty to finish my work in Arnhem Land, sell my horses and ship for Western Australia, a land where I had a great desire to spend the remainder of my trip.

We arrived again at the Katherine station, and camped in our old place prepared to ride north. My old horse was, however, badly lamed, and we had to give him some

time to recover. During these days I roamed about with my gun, filling gaps in my collection and shooting kangaroos for the pot. No beef was to be had, and we had to depend on what the woods offered. During our last stay the kangaroos were very wild, and I did not even get a shot at one. Now of course they were just as wild as before; but I *had* to get them, and this altered the conditions. I employed the native tactics, stalking them step by step, when they were grazing at sundown, and I shot a kangaroo every night many nights running.

The Katherine in this part of its course runs mainly through limestone rocks. Probably for this reason the water had a strong chalky taste and often appeared to cause kidney troubles. As almost everywhere in limestone formation, the land was full of caves. Further down on the Katherine there was an immense cavern, known to Europeans as well as to natives, but I did not get the time to go down to see it. Close to the camp, however, were several smaller caves. They appeared as an opening through the level forest floor into a well of a few yards depth; from the bottom of the well a large cavern led to one side. These caves were very common, and they might have been very dangerous if their edges had not as a rule been surrounded with a dense thicket.

A good many natives were at present gathered in the vicinity of the station, holding a large corrobborree. There were natives from many northern as well as southern tribes, and every night we could hear the drone of their music higher up the river. One night I visited Mr. Burt, the policeman, and we crossed the river to witness the dance, the last savage dance I was to see in Northern Australia. The night was bitterly cold, and the blacks who did not dance lay shivering around many small fires. A large fire was burning in the dancing place, and behind this fire sat the musicians and the old women.

The Agoguil tribe (from around Pine Creek and the Katherine) were dancing their monotonous dance. There were roarings and grotesque movements enough, but

their dance had no special vitality. They soon gave up. After an interval the savage dancers of the Warai appeared. They were painted in ochre and chalk. They had white chalk stripes over the eyes and the whole of their bodies were covered with alternate red and white transverse bars or were spotted with red and white spots. In single file they came softly and, as it were, sneaking into the fire-light, stamping lightly and hissing to the time of the music. As they approached the fire their hisses between clenched teeth increased in strength, a tremendous crescendo appeared in their stampings and twistings in time with the music, and in the tenseness of their splendid bodies their brutal faces appeared passionately distorted in the red light. The wildness of the dance increased until the black bodies looked like devils jumping over the fires of hell. And then suddenly, with one mighty stamp, they stopped and stood still—on the last step of the dance—while the feather ornaments on their foreheads quivered over their hideous faces. An immense howl of applause, a howl as from wild animals, arose from the spectators, evoking a short echo from the white stems of the park-like forest.

We rode north again. We had decided to leave Arnhem Land, and as mile after mile of endless forest disappeared behind us our minds felt a certain relief at the prospect of going to new and strange fields. And this was no wonder. Illness, privations and sufferings had fallen to our lot, and the forests had been our home for more than a year. To long for a change was only human. However inured one becomes to this wandering and irregular life, and however small and insignificant its discomforts may appear at the moment, the memories of a civilised upbringing are still strong. They wake up when the hard work draws to a close, and one's will to endure weakens at the immediate prospect of the cessation of the toil.

At the Union we camped for some time. I had to catalogue my collections and try to sell my horses. Holm got an attack of fever and I sent him down to the hospital at Port Darwin. My old wogoit hunter Jackie joined me, and we made a short excursion into the granite, securing

a few wogoit.* Finally, having parted with my horses and sold my saddles, I went down to Port Darwin, where I decided to go to Roebuck Bay. In order to reach this port we had to go by Singapore, as no steamship connection existed between Northern and Western Australia.

* We also obtained a couple of living wogoit. I kept them in a cage and enjoyed studying them. During the voyage through the Malayan Archipelago the male died. In Singapore the female also died. At first they ate sweet potatoes and bananas very willingly, but finally they refused to eat any food at all.



FIG. 13.

THE AUSTRALIAN CRANE.

CHAPTER XIV

ROEBUCK BAY

Early in September, 1895, we took a cattle steamer to Batavia, whence we travelled to Singapore. Here we took steamer to Western Australia, finally anchoring in Roebuck Bay on the 10th of October. I had chosen this out-of-the-way place partly because the region was practically virgin ground, and partly because from various sources of information I had formed the opinion that the fauna of the district would be particularly interesting. A further reason for choosing Roebuck Bay was also the fact that the settlement was hardly more than ten years old, and that consequently the surrounding country should prove very little influenced by civilisation.

A small steam-tug took us ashore. I asked the Customs officer, who captained the little tug, about the accommodation of the place, and with a curious half-apologetic smile he said that there were two hotels, both equally good or bad—according to the point of view adopted. We now approached a very primitive landing-stage, anchored the tug and landed in a boat. Two or three black boys were the only people present on the landing-stage, and over the top of a sandhill we could see some of the corrugated iron roofs of the houses in the 'town.' Thick mangroves stood on both sides of the landing-stage.

We got quarters in Roebuck Bay Hotel, an establishment that was a very fair type of the 'public house' as found in the Australian bush 'towns.' The main profits of such an hotel or 'pub' were of course derived from the sale of drink, and the whole place was designed to accommodate drunken people. The room allotted one had—like a maniac's cell—only an iron bed, a chair, a table, and perhaps a washstand. You were mostly your own waiter, and the bill of fare was not very varied. The smaller bush 'pubs' of the Australian outposts are generally

very quiet, for the simple reason that guests are exceedingly scarce. But here in Roebuck Bay no hour of the day passed without the loud voices and howls of drunken men frequenting the bar echoing through the sheet-iron walls of the building.

Roebuck Bay or Broome, as the township is termed officially, owed its foundation to the pearl fisheries, and it was still exclusively dependent on the pearling trade. The place offers the best harbour over a long stretch of this coast, which is singularly devoid of bays and shelters. It boasted a cable-station in connection with the West Australian coast telegraph line, and there was a Customs-house. In short, the place offered certain advantages to the pearlers who worked scattered along the coast, and they went there periodically. During the cyclone or 'Willie-Willie' season—December to March—they laid up their vessels in the safe shelter of the bay.

The inhabitants of the town varied greatly in number according to the seasons, but the white section hardly at any time exceeded forty to fifty individuals, among them perhaps half a dozen women. The coloured population, comprising most of the elements of the east, but mainly Japanese, Malays and Manillamen, amounted perhaps to five hundred individuals. These various races occupied various parts of the town. Relations were very strained between them, and upon very small provocation they started fights, which seldom ended without bloodshed.

White people lived here and there, mainly around the Government buildings, which were the most compactly built of all the houses of the township. But these houses, as well as the other structures of the town, were of such flimsy construction that a real cyclone would seem to be able to sweep away the whole of Broome and scatter it far off to sea or over the desert wastes of the inland bush.

Still a third element was noticeable in the population of Roebuck Bay. On their periodical visits from the primeval forests the aboriginal natives went about begging or doing some odd kinds of work in order to obtain a pittance of food or tobacco and, for the rest, lived on fish and shell-fish from the bay. In the starlit nights one might

find them sleeping huddled beside their fires among the sandhills of the coast, the night wind playing with the ashes and wafting the smoke over their naked bodies. And the Indian Ocean rolled in with its breakers thundering along the shore, lulling the savages to sleep, just as it had done for countless thousands of years before the white man ever came to Roebuck Bay.

I immediately set to work in the vicinity of the town, and, in order to inspect the marine animal life of the bay and to attempt the capture of dugongs and various large turtles, I accepted a friendly invitation to spend some time on one of the pearling schooners in the anchorage. With a couple of natives as boatmen I spent almost every day on the bay, equipped with a primitive harpoon. At low water we used to land on the immense coral reefs, where we collected fish and invertebrate marine animals. Without personal experience it is hard to realise the profusion of colour and the astonishing wealth of organisms peculiar to a large tropical coral reef. The reef rises out of the sea as a literally living rock. At every step your foot is bound to crush life. Like gorgeously coloured flowers the corals spread their tentacles shining in blue and green colours, and among and over their mighty blocks the alcyonarians appear to flow, like heavy masses of jelly, in all shades of colour imaginable, from deep shining chocolate brown to deepest carmine, brilliant blue, green and ochre yellow. Everywhere are scattered splendidly coloured holoturians, actinæ or starfish, like flowers in a field, and every object is wet and dripping from sea water and resplendent in the fierce sunshine.

Outside were to be seen dozens of large turtles, which dived for food, or which were drifting half asleep on the warm and sunny surface of the ocean. Occasionally we could scull close enough to harpoon one of these monsters and by united forces hoist it into the boat.

The aborigines of the coast have, however, a simpler method of capturing these turtles, a method which occasionally I saw my men also employ. They simply dive after the turtle. With one hand they grip the edge of the carapace behind the neck, and with the other hand or with their knees they force the hind part of the turtle

down. The heavy animal is thus forced to come to the surface, when the swimmer, easily preventing the turtle from diving again, steers it where he likes.

The dugongs (*Halicore dugong*), the largest of living sea cows, were by no means infrequent in the bay. We were several times only a few yards away from these yellowish monsters, as they quietly rose in the clear water. Yet, in spite of all my attempts, it proved impossible to approach them *quite* close enough to venture a harpoon throw.

On the other hand, I attacked large sharks, especially hammerheads, which were basking on the surface. They were not very shy, and I could drive the harpoon well into them. But as the line sprang taut, and the large shark began towing the boat, our somewhat imperfect harpoon would come out, and we never succeeded in capturing one.

I very soon realised that my equipment for marine work was too imperfect to justify a prolonged stay at sea, and after a week I packed my collections and returned to Broome.

I was in a difficult position as to my work. The funds on which I could count for the moment were only sufficient for work in the vicinity of Roebuck Bay, and I decided upon attempting to reach a suitable field inland or at least outside the town of Broome. I could not afford to buy horses and outfit, and I had to decide on some convenient headquarters whence I could collect and make short expeditions on foot. There was not much variety to choose from. In the whole of the country inland of Roebuck Bay there were only two cattle stations, and one of these was so awkwardly situated that I could hardly think of settling there. The other, which was owned by Messrs. Streeter and Co., of London, was admirably suited to my purpose, and the firm's agent in Broome very kindly gave me permission to stay at Hill station, situated on the sea about twelve miles north of Broome.

While making preparations for this stay I had, however, secured some collections in the vicinity of the town. Except for the animals and birds of the sea shore, the fauna was very poor. Wading birds were constantly

found on the beach, and among these were large flocks of curlews and whimbrel. Fish were exceedingly plentiful, and when the tide rushed into the narrow inlet at the bottom of the bay, named Dampier's Creek, the Japanese fishermen were very successful with their seines. Sharks were very numerous, and vicious brutes they were, some of them. Once, when rowing up Dampier's Creek at high water, I experienced a striking example of this. A six foot shark ran suddenly out of the mangroves and, making a vicious grab at the blade of my oar, almost knocked me off the thwart. A number of shark's teeth were afterwards found embedded in the hard ash of the oar. Sea snakes were very common, and everywhere on the surface of the water the poisonous brutes could be seen swimming. But they immediately dived upon the approach of the boat, and it proved impossible to capture them.

The interior was apparently a desert land. A long and immense plain bordered both sides of Dampier's Creek. This plain was broad and wide, the soil being a light-coloured fine sand. Here and there one found the remnants of a few dry straws, the remains of a withered vegetation. Along the edge of the plain and between the plain and the sea rose a series of low sand-hills covered with spinifex grass. A low and stunted forest covered these ridges and ran like a brownish carpet between the plain and the ocean, continuing in a limitless waste towards the hazy horizon. Along the beach ran a huge sand-bar, an enormous wave of drift sand, looking almost like an Alpine snowdrift. White and shining, this sand-bar ran with few interruptions along the entire coast, a white beach dividing it from the sea. The sand-bar might be from thirty to fifty feet high, and it seemed to me to have been formed through the action of the winds, perhaps in connection with gales and high tides. For thousands of years the wind had swept the sand together against the foot of the shore and a scanty vegetation had assisted in the accumulation of the drift sand. One of the features in these sandhills was a peculiar green bush with broad and green woolly leaves. It grew here and there on the coast bar, putting up a plucky fight against wind and sand. It was a papilionaceous plant and its

fruit was a large pod. The flowers were very peculiar, having a striking resemblance to a smallish green bird.

The height of this coast-bar had also been added to by the natives. For thousands of years they have had their meals among the sandhills, and this was proved by the presence of marine remains. The bones of dugongs, turtles and fishes were found here in enormous numbers, but the dominating feature in these kitchen middens was the mass of sea shells, among which a cockle (a species of *arca*) was very noticeable. This *arca*—the exact species of which I have not determined—generally called ‘cockle,’ was about two inches long, and great banks of it were exposed at low water. It constituted the staple food of the natives—was indeed to the native what the potato is to the Irishman—and great quantities were gathered daily by the women. They were eaten roasted, and several quarts of shells might be left from the meal of a single native. Layer after layer of these shells might be found by digging in the sandhills, and I consider it very probable that the coast-bar has been augmented by means of these shells, principally because they have the power of holding the drift sand together.

The view from this coast-bar was very curious. As one looked north, the coast-bar and the white beach appeared to bisect the landscape. To the left was the ocean, blue, limitless. To the right one saw a brownish forest and grey plains, flat, endless as the sea. And above, high in the whitish heavens, hung the sun. Your own shadow fell between your feet and the heat-glare flickered, dancing over the desolate landscape. In the desert-like bush only now and again a lonely bird would flit before you, hardly able to breathe in the heat. Here and there were burrows in the soil, large and small, tracks of lizards, snakes and mammals, leading into them from the brick-coloured sand. Even in the anthills animals appeared to burrow. The anthills were here, by the way, mushroom-shaped, and they evidently belonged to other species than in the north.

A lizard would rise, scuttle away, and disappear in the mouth of a burrow. Everywhere there were burrows in the sand. All living animals which had the faculty

appeared to dig into the ground in order to avoid the fierce sun and obtain some coolness and shelter which the flat ground and the scanty foliage were powerless to yield.

In these parts I also found a peculiar instance of amphibious life, showing how a sea animal may become a dweller on land, and how the fauna of sea and land may to some extent have species in common. Sitting at night on the hotel verandah I was surprised at hearing a peculiar tinkling or rattling sound. It sounded as though someone were shaking pebbles to and fro in a vessel. Taking a lantern I went out to investigate. The soil appeared to be covered everywhere with dead cockle shells and dead shells of whelks and other sea snails. These of course lay perfectly still. But after a moment or two the dead whelks began suddenly to move, rattling among the dead cockle shells. As soon as I moved they stopped again as though dead. Upon examination they all proved to contain hermit crabs. They were everywhere, they covered the ground, and one could hear the rattle of them in the dark. Even when one shook a tree they came tumbling down like ripe fruit.

During the day they kept quiet, heaps of them sleeping under bushes, in burrows and in hollow trees. These hermit crabs were large, being considerably larger than the species found in Europe, and the shells which formed their houses would occasionally run to the size of a boy's fist. The majority appeared to occupy shells the size of a walnut. One remarkable fact was that *quite small ones* appeared to be entirely lacking. Only on the beach between the tide marks were the young to be found, and apparently it is only when they reach a certain size that they go inland. That they really migrated from the beach was amply proved by the fact that I met them on their way several hundred yards inland and followed their tracks back to the sea. Thus as grown-up animals they live inland, and as young in the sea.

Life in Broome did not offer much comfort or variety. The hotel has been previously sketched by me, and the men who were its customers, mainly pearlers, were certainly not angels. But they were sociable. Under the

conditions peculiar to settlements of this kind everyone is placed on the same level. Very unconcernedly everybody appeared to walk into anybody else's house or hotel room. At breakfast and during the forenoon most people were sketchily attired, and at dinner one sat in shirt sleeves, the *table d'hôte* being a shaky table on the coolest verandah. A mob of grinning blacks would very often stand outside, devouring everything we had with greedy eyes, until the proprietor of the hotel would dive off the verandah, scattering them howling in various directions.

And on moonlight nights, when the tide was high, everybody undressed and, with a towel as a loin-cloth, sauntered down to the beach, where we had a nice swim inside the mangrove thickets. There the risk of sharks was only slight. Very fine were those swims in the salt sea water, which bit into your sunburnt skin and washed away the dirt and grit accumulated during the windy day. Although the water had a temperature which even at midnight must be high—on closing one's eyes one did not notice the change from air to water—those swims were singularly refreshing. When the moonshine glittered on the oily swell which swayed your body gently to and fro on the sandy bottom, when you felt the water swirl around your naked body and heard the roar of the breakers outside, as the wind wafted in the coolness of the night, you felt as if your dulled thoughts were reviving; you felt as if your brain had been like melted fat in your head during the hot day. Now it cooled, became firm, and performed its functions.

Even in that desert land there were moments when your eyes might revel in charmingly beautiful colours and tints, perhaps more beautiful from the contrast they presented to the white sun glare of the day. When the sinking sun hurried towards the west and finally buried its red disc in the blue ocean, it appeared as if all the powers of heaven and earth were united in conjuring up one singularly beautiful moment. It was a moment which I could ever enjoy. At night I would sit on the coast-bar looking at the burning splashes of blood which rose in the heavens above the blue horizon of the sea. Around me the white sand and the barren bushes would be red from the after-

glow. I would feel the soft current of the night wind, a mild and warm wind carrying on it the lonely note of the curlew which dwelt among the mangroves. And the night wind would die down, the blood of the heavens would fade, and the ocean would appear dark and desolate under the last gleam from the sunken sun. And from the sea, where the tide was softly flooding the muddy beach, I could hear the blowing of dugongs and porpoises; the last whisper of wind died in the sandhills, the earth, revolving on its axis, slowly turned to the east, and darkness fell.

Sitting there alone one might imagine the time when no keel had cut the virgin sea, when no white man had stepped on the coast, when only animals and savages lorded it over this land—as it was when two hundred years ago the pirate Dampier dropped his anchor, and his buccaneers fetched wood and water from the unknown shore.

But when I returned to the hotel I met the shouting customers of the saloon bar; and the drunken babble of half-civilised loafers, mingling with the click of worn billiard balls, became an abomination.



FIG. 14.

MY HOUSE AT LOOMINGOON.

CHAPTER XV

HILL STATION

Mr. Male, the agent of Messrs. Streeter and Co. in Broome, was kind enough to drive us and our traps out to Hill Station. Enormous sandy plains, interrupted by endless strips of low crippled forest, ran along the coast in desolate and level monotony. The sun was burning with a white-hot glare and the horses jerked the buggy laboriously through the deep sand. Hour by hour we drove slowly north. From the top of a sandy and wooded ridge we finally obtained a glimpse of the ocean. The low forest opened out, and below us a barren and sandy ridge sloped towards the white sand-bars of the coast. The ocean was a bright blue, and a fair breeze blew towards the shore. Half-way down the sandy slope was a house of galvanized iron surrounded by some huts and sheds. This was Hill Station. We were well received by Mr. Marshall, the manager, and established ourselves in our new quarters.

The house was situated in the vicinity of an old shore line. Between the house and the ocean were situated several large sand-bars, divided by longitudinal valleys. There were two main bars, the inner being higher than the outer one, which sloped towards the beach, and these bars obviously proved that the land had been rising gradually. Here and there in these bars rocks were visible, being of comparatively recent origin, mainly hardened sand and coral. And these rocks everywhere exhibited signs of the action of the sea. Three old shore-lines were plainly discernible in these rocks; one under the edge of the forest at about forty feet above sea level, another on the inner sand-bar, and the last one situated on the outer bar. This latter shore-line was at present exposed to the action of the sea only during exceptionally high spring tides. During normal tides an enormous

beach of white sand extended along the sea. The water broke around scattered reefs which here and there protruded from the sand, and which obviously denoted the present level of the shore-line.

The main and characteristic feature of this coast was the enormous stretch of sandy beaches that ran along it almost without a break. Between Hill Station and Roebuck Bay the white beach ran for twelve miles, and towards the north it extended as far as we could see. The record for these beaches was held by the so-called 'ninety mile beach' between Cossack and Roebuck Bay, which, as its name implies, is ninety miles long, probably one of the world's longest beaches.

A scanty vegetation grew on the sand-bars and the slopes. Further inland one met the peculiar stunted forest called 'pindan' by the Colonists. It extended for miles, level, desolate, a red sand forming the soil. Here and there the pindan alternated with enormous plains, bordered by paper-bark groves. It was, indeed, a remarkable landscape which surrounded this lonely station. Forests and sand and a bright blue sea, and everything apparently limitless.

The whole of the inland of Roebuck Bay exhibits one peculiarity which renders it unfamiliar to the European. There is no water on the surface of this land. No brook runs, no river flows, no lake glitters in this desert land, the surface soil of which does not hold water. The soil is everywhere a loose, red sand, which rapidly absorbs the rains of the wet season. Only in certain places occur so-called 'clay pans,' which for a time have the power of retaining the rain water. These pools, however, quickly evaporate and, even if excessive rains have filled the clay pans with comparatively large volumes of water, the liquid soon becomes salt and unsuitable for human consumption, and finally towards the close of the dry season these pans dwindle to small and slimy ponds. In one place a small spring is said to exist, the water forming a little pool, which is continually evaporating.

For all practical purposes, however, the land is dry, perfectly devoid of surface water, and, in order to satisfy the demands of life, man and animals have to dig for water.

The level at which water may be found by digging varies considerably according to the nature of the land; but along the coast and even in the inland regions, which rise only a few feet above sea-level, water is met with at a depth of three or four feet in favourable places. Although this water is often saline or brackish, it is nevertheless drinkable, and even a European is soon able to overcome his immediate aversion from it.

This difficulty of access to one of the main necessities of life must obviously influence conditions to a very high degree. It would be natural to suppose that the plant world of this land, on account of the dryness, should show many peculiar forms adapted to the special conditions. Except, however, for some salt plants which were specially suited to withstand the drought, the vegetation proved to be largely similar to what I had seen in the northern and better watered parts of the continent. One met apparently the same trees, the same bushes, the same grasses. On this coast, however, they seemed to have accommodated themselves still more intensely to the absence of water. The training of thousands of years has obviously enabled these plants to perform their functions of life by means of the moisture absorbed during the wet season. But the extreme conditions appeared to have crippled and dwarfed them.

The sandy soil was only sparsely covered by grass, and that mainly the spinifex grass, which possesses extremely sharp blades. Even during excessive drought this grass kept green, and at the station it formed the staple food for two to three thousand head of cattle. The water for these cattle was procured by means of wells distributed all over the pasture, and these wells were served by native families, who hoisted the water into troughs and were served a weekly ration of beef, flour, sugar, tea and tobacco as payment.

Not only the cattle quenched their thirst at these wells, but some of the animals and birds of the forest also would turn up to drink at certain hours of the day. These regular visitors mainly belonged to a certain limited number of species. The great majority of species appeared to drink very little. They seemed, in fact, to be able to

do without water, or at least to be able to obtain the necessary moisture in other ways than by drinking.

I shall not enter upon a detailed explanation of this latter phenomenon. I will only draw attention to the fact that the night dew, if not constant, may still be important, and may play an appreciable part in the economy of these animals, especially as regards the smaller species. Some of the large mammals, as well as the natives of the coast, may also quench their thirst with sea water. This must not be taken as a statement to the effect that the natives normally drink sea water. Their drinking water is as a rule obtained from the time-old and primitive native wells. But I have seen the natives drinking with pleasure water so salt that I should have been unable to swallow a single mouthful of it, and according to their own reports to me they do at a pinch drink sea water.

The heat was usually very oppressive, varying from ninety-five to one hundred and twenty-two degrees Fahrenheit in the shade, and the wind which during this season blew in from the sea had very little power of bringing relief. As soon as this wind rose to any appreciable strength the whole land was smothered in drift sand. When, however, the wind changed, blowing from the east, life became a veritable hell. Every breath of wind appeared to come from an enormous oven, and the air was so dry that every drop of perspiration evaporated at the very moment it sprang out on your skin. One might walk quickly and even go through heavy exertion and still feel dry as a bone.

And when nothing but brackish water was available to quench one's unspeakable thirst, it will easily be understood that life was not very pleasant according to civilised standards.

During the greater part of our stay Mr. Marshall was absent, having some business at an out-station further inland, a station which I subsequently visited. Another white man, by the name of Capewell, was employed at the establishment, but he was stationed at a well eight or ten miles away in the pindan, only occasionally appearing at the head station for rations. The management of the station was under these circumstances left to me, and as

the duties were not onerous, I gladly accepted them. My work consisted mainly in seeing that the blacks kept the troughs of the nearest wells supplied with water and that the black women watered the small vegetable garden. These duties could easily be included in my daily shooting walks. Twice a week I had also to measure out rations for all the well-blacks of the station. We had a Chinaman cook and a couple of native women to fetch wood and water, keep the house in order, etc., etc. Our food was not especially varied, but it was not so monotonous as the cuisine of ordinary camp life.

In the garden grew a few chives, and a loph, which festooned itself picturesquely about the ramshackle fence, and provided us now and then with a course of vegetable marrow. But in the main our diet was bread, preserved yams and meat. Almost every week we killed a bullock. Capewell then came in with a couple of saddle-horses. We rode out, found a likely animal, and in the company of a number of its mates the bullock was driven to the station and into the cattle yard, where a well-directed bullet from my rifle killed it. A couple of hours later the bullock was skinned, cut up and salted. Only a small piece of fresh meat was roasted by our Chinese cook. Fresh meat did not keep, and even dry-salted meat would only keep for a few days unless it was hung up and dried as hard as stockfish.

We were, however, easily able to obtain some change from the eternal salt meat. There were plenty of pigs on the station. They had been introduced some years ago, and these black Chinese pigs had, as usual, multiplied to an enormous extent. They ran wild about the place, feeding on whatever they could find, and in a wide vicinity one met them almost everywhere. In the neighbourhood of the station there were several sows with an enormous number of piglets, which constantly swarmed about the houses, eating whatever they could get. These pigs were a great asset. Almost every second morning I took my rifle and, stirring up the pigs, I quickly despatched one of the piglets. The Chinaman roasted it for dinner, and afterwards we feasted on cold pig as long as it lasted.

The house contained several rooms, but we seldom used them. They were dark and dismal, being without furniture, and, the floor being eaten by white ants, we ran the risk of stepping through the brittle planks. Right through the middle of the house ran a room which was more pleasant, and here we had our meals and, when it was windy, also slept on shaky bedsteads, which we had made from sticks and raw hide strips. Most of the time, however, was spent on the verandah, which faced towards the west, and where the sea breeze could blow. Here we slept during the hot and close nights.

The furniture? Well, really, I cannot remember anything in the way of comfort but a couple of old cane chairs, a couple of benches and a 'dinner table' composed of the boards of old packing boxes. It swayed dangerously when we sat down to our hurried meals. In spite of the heat our appetite was fair, and occasionally became ravenous—when the cold fried piglets appeared on our table, which was festively lit by a flickering 'slush-light,' an old tin filled with dripping, a piece of rag serving as a wick.

And queer guests were attracted by the light on our humble table. A great variety of moths, beetles and other insects assembled about it, and these attracted another and quite amusing guest. In all Australian houses lives a small gecko (chick-chack). During the day it hides in dark nooks and corners, but after dark this small lizard is heard rustling along the sheet-iron of the house and uttering a peculiar soft smacking note.

As soon as the lamp was lit and we sat down at table we could hear the soft smacking note from under the roof, and with a wet thump the gecko would land on the table, sometimes even on our plates. The little creature would then sit perfectly still. Its fat, white and clammy body would, by a queer association of ideas, remind one of a graveyard. It looked so eerie and clammy and transparent—almost unreal: for all the world like some strange being which from time immemorial has slumbered on the fringe of life and now suddenly awakens and tries to grasp its surroundings. The shining eyes protrude like two black boot-buttons from the little white head.

The small reptile keeps quite still for some minutes. Then suddenly, like a white streak, he darts at an insect, swallows it with an indolent little grin, and quietly waits for the next one. All through the meal he hunts insects round the light. Night after night the gecko joins us—he becomes almost a table mate, a comrade, missed when on rare occasions he fails to appear. He becomes very tame. At last you may softly stroke his clammy back with your finger.

A pearler in Roebuck Bay had given me a fox-terrier of the name of Maggie. She followed me everywhere and was a splendid chum, even if her merits as a gun-dog were not great. The kangaroos almost broke her heart. They left her behind at once. But snakes were her speciality, a passion, I think, common to most fox-terriers. Discovering a snake, she would attack it quite fearlessly, grabbing it by the middle and shaking it with a rapidity which made the beast powerless to bite. Then for a while she would let go her hold and bark furiously in order to attract my attention. But very soon she was at the snake again and only gave in when I arrived and killed the reptile with a stick. Poor Maggie, her passion for snakes finally cost her her life.

The kangaroo rats were also her hereditary foes, and very often she had occasion to tackle these small mammals. Their runs, which remind one principally of rabbit burrows, were abundant almost everywhere in the vicinity of the station. These animals, which are about the size of a rabbit, have comparatively short hind legs, and they are easily recognised by one of the molar teeth having a peculiar sawlike edge. They occur almost everywhere in this region. The colonists call them kangaroo rats, the native name being 'yalva.' The scientific name is *Betongia Lesueurii*. They proved to be quite the commonest marsupial of these parts.

These animals seem to avoid the open plains; but all wooded regions, and especially the undulating sand-hills, are inhabited by countless numbers. Several individuals, in fact a colony of them, dig their burrows close together, and the various passages are connected, no individual thus having a separate burrow. Their food

mainly consists of a small ground-nut or tuber named 'nalgoa' by the natives, who also regard it as a very important item of food. This tuber grows everywhere in the sandhills and is easily dug up.

Not only do the individuals of one colony have their burrows in common but a similar partnership appears to exist between various neighbouring colonies, and all the animals within a fairly large area appear to form one large family, the members, however, being fairly independent. The yalva must, of course, be termed a sociable animal, but the sociable disposition does not appear to be very prominent in each individual. The fact that these animals live in colonies may, I believe, be explained by the assumption that experience must have shown them that it is far easier for a large number of animals to dig a complicated burrow than it is for a few individuals. The day is spent asleep in the passages of the burrow, and just about sundown the yalvas appear outside. These lively animals are very soon off in search of food. The night is spent in feeding and, according to my experience, *they never drink*, at least not during the dry season. I never found their tracks near any well nor on the sea beach. Although a watering trough for cattle was no more than a couple of hundred yards distant from a burrow, where I used to shoot my specimens, I could never discover yalva tracks at the little pool formed by the overflow from the trough. However sinuous and complicated the burrows of the yalvas were, the dangerous foes of the species could easily obtain an entrance. The large pythons for instance, the *Python molurus* and *Aspidotes melanocephalus*, frequently visited the colonies, hunting the yalvas.

Close to the station was a sandhill, where I usually did my yalva shooting, and an extract from my journal may be of interest:—

“ 6th November, 1895, Hill Station.

“ At sundown I walked over to the sandhill, where last night I had shot yalvas. I sat down behind a small bush on the slope, watching the holes from which the yalvas should emerge, and while waiting I sketched* the hill and the yalva burrows.

* See page 306.

“What lay before me was no grand view which could repay me for sitting there waiting in the sand between the broken tufts of spinifex grass. Behind me was a small valley with stunted and sombre bushes, stretching in varying shades of blue and green towards the low red slopes, which limited my view inland. Before me was the even slope of the sandhill. A few green bushes were scattered between the yalva burrows and their reddish heaps of freshly excavated sand. Two or three stunted trees rose above the brow of the hill, and further west I could see the white sand-bars and the ocean, where long breakers roared on the white beach. And behind the horizon the sun set like a large red disc. In the tropical dusk its red afterglow enhanced the red colour of the sand, and the trunks of the dwarfed trees in the sombre bush held the red light of the gloaming for a while.

“I had not waited long when the plump and woolly form of a yalva suddenly appeared sitting on the red sand-heap in front of a hole. It made a couple of playful jumps and then sat still again. I fired, and the animal rushed about in the sand until another shot settled it. Then I secured my prize and sat down again.

“Pigeons came from the pindan on their evening flight. One by one they passed me on their way to a water tank among the sandhills near the shore. A shepherd's companion sat some distance off wagging its tail and twittering a few bars before going to roost. Everything else was very still. Suddenly a woolly yalva appeared again as if shot up from the ground. Firing immediately, I saw it jump more than a yard into the air and fall down on its back, but with a last effort it got into a hole.

“The range being somewhat long, I altered my position, but darkness now fell so rapidly that I resolved to go home. Before going I took the precaution of mounting the hill to see if there were any yalva on the opposite side. Having advanced a little I saw a yalva, but it immediately dived into its hole. Taking cover behind a bush, I waited for some time. Almost immediately a yalva came jumping from under some bushes and, having taken a few hops in my direction, settled down. Quietly raising my gun, I dropped it stone dead,

and while the soft breeze swept the smoke slowly over the hill I secured the animal and turned towards the station."

Mammals were, however, not plentiful on the whole. The common jungle or river kangaroos lived there, and in places they appeared to be more numerous than I had found them in Arnhem Land. But, besides this species and the yalva, I only saw two other macropods. The common opossum occurred and the blacks brought me some young ones, which became very tame. The little flying squirrels (*Petaurus breviceps*) were also to be found in small numbers. The bandicoots were here represented by a different species from that in the north. This species was *Parameles obesula*, which is somewhat smaller and plumper than *Parameles macroura* of the north. Of the marsupial weasels I only saw the *Phascologale penicillata*, and the placental mammals were only represented by a rodent, *Conilurus boweri*, which I killed in the house, and also by a few small bats, besides the ubiquitous dingo, whose howls filled the West Australian night. I never saw tame dingoes among the natives. They kept a number of small weird European mongrels.

As I had expected, this dry and sandy land proved exceptionally rich in lizards. A great profusion of species occurred, and several species, new to science, were discovered, and these were subsequently described by Mr. G. A. Boulenger, F.R.S., in the *Annals and Magazine of Natural History* (Ser. 6, Vol. XV., Sept., 1896). Specially numerous were the *Agamidae*, a family exhibiting a wealth of peculiar species, many of them being queerly, even monstrously, shaped, with remarkable proportions and often quite fantastic dermal formations.

Many of these species, in fact the majority of them, lived in burrows in the sand, and particularly characteristic of this district was the *Amphibolurus reticulatus*, a lizard eight to twelve inches long. Their low spiral-shaped galleries were excavated as much as six feet into the sand. At the bottom of these burrows I found their inch-long parchment-like eggs, and tiny young were also easily discovered in the interior of these habitations. The low openings of these burrows were visible everywhere in the

loose sand, and the blacks dug out large numbers of the lizards.

Through the works of Mr. Saville Kent I was acquainted with the fact that the large frilled lizard, *Clamydosaurus Kingii*, possessed the power of walking on its hind-legs. His statement of this fact had justly awakened considerable interest, as no living saurians were known to walk or move in an upright position. Chiefly on account of certain peculiarities in their build it had been supposed that some of the large extinct Dinosaurians, for instance *Iguanodon* and *Megalosaurus*, had been able to walk on their hind limbs.

While staying in Arnhem Land, shortly before Saville Kent's reports appeared, I had the opportunity of collecting numbers of the frilled lizard, which in places was very abundant. At that time I was mainly busy with other things, and my specimens were mostly brought to me by the natives. In Arnhem Land I hardly ever saw a live specimen in the forest.

Upon my arrival at Roebuck Bay I was greatly interested in Saville Kent's report on the upright walk of the frilled lizard. To convince myself as to the correctness of his statements was an easy matter, as this lizard was very numerous in the pindan. The reptiles were commonly perched on the lower branches of the stunted trees, whence they immediately jumped down and fled on their hind-legs, carrying the head and fore-part of their body erect like a kangaroo. I also remembered having seen in Arnhem Land lizards which always, when running, moved on their hind-legs, species however entirely different from the *Clamydosaurus*.

My curiosity now being aroused, I spent a good deal of time in studying the methods of locomotion of many of the species that abounded in Dampier's Land. These investigations proved that several species of lizards, mainly *Agamidae*, and relatives of the *Clamydosaurus*, when running, made use of their hind limbs and their hind limbs only. Among the lizards of this region there were at least three species, besides the *Clamydosaurus*, which had this habit of locomotion. The small and variably coloured *Diporophora bilineata* (four to six inches long), which fled

before one's feet, whenever one walked through the spinifex, was easily observed at close range and was always seen running on its hind-legs.

Everywhere in dense growth one found a somewhat larger lizard, *Physignathus temporalis*, which also frequents the edges of all jungles in Arnhem Land. It is an excellent climber, and when startled almost always resorts to trees or bamboos. If a lizard of this species is startled from its sleeping place—commonly only a few yards away from the thicket—it runs with incredible rapidity on its hind-legs until it reaches a tree or some other refuge.

A still larger species, the *Physignathus Gilberti*, attaining upwards of thirteen inches in length and occurring in countless numbers in Dampier's Land, moves in the same

manner (see illustration). Characteristic of the upright run of these lizards is their enormous rapidity of movement, a rapidity which in the case of the last species renders it difficult for a



Fig. 15.

Physignathus Gilberti, running.

man to follow the lizard in open country. When running the body is held very erect—at an angle of about 45 degrees—and the long tail is curved upwards, the forelimbs being held close to the chest. When the lizard walks all four legs are used. A peculiarity common to all these species also is that, when observed at close range by man, they make a queer pawing movement with one of the forefeet, as though making a deprecating gesture.

A great number of Australian lizards carry the forepart very erect, although they make use of all four limbs when running.

Examining the stomach contents of the lizards in the

vicinity of the station, I generally found it to consist of insects, and most of these lizards appear to be insectivorous. Nowhere in Australia have I seen the insects so numerous and so varied as in Dampier's Land, and I was greatly surprised at the scarcity of bats. Excepting birds there appeared to be very few other insectivorous animals, and the part of the insectivores appeared to be largely undertaken by the lizards, which probably were benefited by the scarcity of other insect-eaters.

Besides these lizards and other burrowing animals before-mentioned, a great number of other organisms had also developed burrowing habits.

Various spiders burrowed in the sand, digging funnel-shaped pits down from the surface, and at night a soft purring note would issue from the spiders at the bottom of these holes.

A large scorpion, the sting of which the natives asserted to be very painful, also dug galleries into the sand. The gallery ended in a funnel-shaped pitfall on the surface, and the scorpion lived by devouring the unhappy creatures that unwittingly entered the pit and rushed down its sandy slope. The gallery wound spirally down to the depth of about one foot. At the bottom I found the scorpion—light brown, ugly, and full of fight when I had dug down to him with my hunting knife.

The birds of the stunted forest or pindan were quite numerous, but they led a queerly silent life. In the heat of the day, when the fierce sunlight blazed on the twisted trees and the stark thickets of verticordia, the forest was most desolate. Silence there was not, because thousands of chirping cicadas set up a deafening concert, and startled birds would utter harsh and brittle notes. Bird life in these forests was mainly the same as in the north, but less prolific. I found, however, a few birds that were unfamiliar to me.

I will not dwell at any length upon my wanderings in the arid pindan, and its animal life. Even without native aid I was now quite competent to track almost anything, my senses being now, through long training, almost equal to those of a savage. I shot my specimens, I dug them up, I chopped them out from hollow trees, and my

hunting adventures could fill a book. But to readers unfamiliar with the varied bird and animal forms, a tale of their ways and habits would perhaps become tedious. And should I attempt to explain the cunning, the tricks which years of experience had taught me, and which caused my collecting basket to be always well filled when, tired and worn, I returned from my excursions, some people might consider me cruel and inhuman. This thought even occurred to myself at times. When tired and thirsty I trudged along and observed the virgin nature around me, strange thoughts would come to my mind. Towards sunset when the blue horizon of the ocean sprang boldly out against the sky and the forest seemed to awaken, as birds and kangaroos and strange reptiles came out in the cool evening hour, even this poor land seemed to me a paradise which I was desecrating.

Yet my life in the forest and on the sea shore did little to remind me of civilisation. It was rather apt to turn me into a care-free pagan bent only on the needs of the day. What difference was there indeed between myself and the black aborigine? He killed in order to live. I also sustained myself by continually taking life. I also had to live at the expense of animals and birds of the forest. Time was when I forgot civilisation, when more than anything else I felt myself a brother of the wandering savage, when the phenomena of civilisation became ridiculous and familiar things appeared strange to me.

I sometimes thought it a queer and sacrilegious thing that civilised man should build large buildings, called museums, full of glass cupboards, where the corpses of all the world's beautiful beings were exhibited to a gaping multitude, and where wise old men sat in their sanctums classifying every corpse of bird or animal, and sometimes proclaiming this or that to be a great rarity.

But in the forest and plains surrounding me and along the shore of the ocean, there were no corpses. There was only life, manifesting itself in the growth and development of birds and animals. And when death came to them, almighty Nature mildly effaced the traces of decay, and winds of oblivion wafted over the sun-baked plains.

But civilised man, for the sake of learning, takes his pleasure in seeing life represented in the garb of death, because his opportunities are too poor for anything else. And the books of learned men are mostly long reports on corpses.

At other times, however, the consciousness of belonging to civilisation would be the predominant feeling. There were moments when the propensities of civilised man came to the front, when all cravings arising from heredity, breeding and previous life rose in rebellion against the monotonous wilderness of the sand which surrounded me. And then I felt the first faint pangs of homesickness.

When the pindan became too hot and I grew tired of its monotony, I had recourse to the shore, where the long breakers rose and fell on the snow-white beach, and where thousands of waders followed in the track of the receding wave, fleeing again before the next comber.

A great variety of birds frequented the beach. The cosmopolitan curlews and whimbrels were wild and wary as usual. A species of oyster-catcher—very like the European species—fled crying before one, and a variety of other waders mainly belonging to the genera *Charadrius* and *Tringa* occurred in swarms. The effect of a shot would have been murderous. A single species of gull—probably the *Xaema Novae Hollandiae*—and a profusion of terns covered the shore in white and glittering sheets, rising at long range. Here and there would be seen single herons or a red-necked avocet, and high in the air would be seen soaring on slender wings the little frigate-bird (*Tachypetes minor*). And almost all of these birds were very wild. There was no chance of getting at them except by firing at excessive range. Very often it proved almost impossible to get closer than a hundred yards. But aiming high above the birds proved effective. Seeing the smoke they would rise, and the elevation of the shot being right the birds would fly into the shower of pellets, which generally took effect. Sometimes I would find as many as a dozen birds dead after one of these long shots.

As previously mentioned there was a reef in the beach, and at low water—the tide amounting to some thirty or

forty feet—large pools of sea water were left in the rocks which were hollowed and honeycombed by the wash of the sea. A profusion of organisms lived in these pools. Gorgeous crabs hid in the rocky crevices, and shoals of fish swam in the crystal-clear water. We had no fishing gear, but the blacks captured great numbers with their hands. They also employed spears, straight and simple rods, pointed at both ends, the points being hardened by fire. They speared mainly rays, sawfish and turtles, which sometimes ventured within range of the shore. To capture smaller fish, especially shoaling species, they employed a fish boomerang, an implement consisting of a thin wooden board shaped like a broad sickle, curving almost at right angles and having sharpened edges. The fisherman grips the longer end of the implement, the curved back of the boomerang turning upwards, and takes up his position at a place where the shoals pass. The boomerang, when thrown, whirls round like a wheel and, entering the water, may cut through a number of fish.

The natives of these parts were somewhat different from the people of the north. There was no essential difference, but local peculiarities in their life and their apparatus of life were noticeable. Their spear, for instance, was simply a long, thin stick, pointed and burnt hard at both ends. No woomera or throwing stick was employed for throwing it. This was, I judged, due to the simple fact that in these parts there was no available material for the manufacture of a spear light enough to be thrown by a woomera. There is no bamboo, no reed from which light spear shafts may be made. The stunted trees of the pindan yield no suitable material for spears. Only at the edge of the plains and in the large paper-bark swamps can one find a sufficiency of saplings straight and slender and mainly belonging to hard and heavy woods. For this reason the natives of these parts have to make a heavy spear which can only be thrown by the hand. They know the woomera—in fact I have seen specimens among them—but these woomeras have all come from regions further north about the Fitzroy River.

A short stick or cylindrical club made from heavy wood, hard as iron, is a constant and regular weapon of

the natives, serving as a missile against birds and kangaroos, also being employed for purposes of offence in tribal quarrels. A very narrow shield, made from light and loose wood, also forms part of their fighting outfit. But their main fighting weapon is the boomerang, locally named 'jiregalla,' and this is made from the hard wood of a particular tree named 'jiregalli.'

The boomerang is a narrow sickle-shaped implement made from exceedingly hard wood, being almost flat on one side and convex on the other. The greatest thickness is in the middle and the points bend somewhat up towards the convex side. When thrown the boomerang spins round like a wheel, acting as a convex rotating plate, the air acting against its convex side. In other words this convex plate is thrown in such a way that it floats on the air and, by special manipulation, the rotating boomerang may be given various directions and may even be made to return to its owner. It has generally been accepted that the main feature about the boomerang is just that capacity of returning to the thrower. But, to my mind, that is not its most remarkable feature. Its returning is, indeed, only a casual consequence of its main principle of construction and use. No thrower, however skilful, can make the returning boomerang land so close to him that its return is of any practical importance. An expert boomerang thrower may indeed, when only throwing for this purpose, make the returning missile land very near to the starting point, may even be able to pluck the returning boomerang from the air. I personally have attained a limited proficiency at this game. But when throwing at a definite target nobody can calculate on its return. And no native cares about the return. The main point is the way the boomerang behaves *before* striking its target.

The most important thing is obviously the fact that it does not travel in a straight line towards the target. A spear, a club, etc., travels straight, and a man who is the object of one of these missiles has only to await the arrival of the weapon and calmly step aside to avoid it. But the boomerang travels along a curve and the person thrown at does not know on what curve it will arrive.

Only the thrower knows this curve and, aligning the missile in various ways, he may cause it to describe curves of great variety. The boomerang may be thrown to the right and to the left. It is always thrown with the right hand, the flat side always turning downwards. It is always held like a sickle and not like a sword.

It must not, however, be taken for granted that the curve described by the boomerang will be the same during the whole of its course. By dint of varying force, assisted by wind and gravity, the track of the boomerang may be made more or less hyperbolic, and there is hardly any limit to the variations in its course. It is absolutely one of the most devilish missiles ever invented. If one attempts to avoid it, it appears to pursue one, and a chop from its heavy, sharp and rapidly rotating blade is equivalent to the cut of a blunt sword. A well-placed hit may drive the horn of its sickle-shaped blade more than six inches into a man's flesh or between his ribs.

I saw no stone implements among the natives of these parts. If the stone axe ever existed it has at all events now been superseded by European axes, but there were not many natives who possessed one of these. These people of the coast appear to use the axe very little, and I doubt if they have ever had stone axes. There is no serviceable stone, and in case of stone axes having existed among them, they would probably have been derived from inland parts. Further south and north stone axes were to be found. Stone knives were also absent. They now use

principally old broken table knives, bits of hoop iron, or other iron scraps, ground down to chisels, in order to manufacture their wooden weapons and implements. But in the old camp sites, which abounded along the shore, and which were indicated by large heaps of dead shells

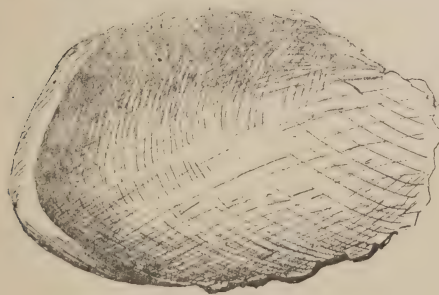


Fig. 16.

KNIFE MADE FROM A PIECE
OF BAILER-SHELL.

and bones from marine animals, I repeatedly found their original knives, which were possibly still in use. These knives were made from bits of the large 'bailer shell' (*Cymbium aethiopicum*), a gigantic snail, whose shell is almost the size of a wash-hand basin. One side of these bits of shell had—with sand or sandstone—been ground down to a keen curved edge, very well adapted for the purpose of cutting wood, when used in the native way as a chisel.

Their household utensils were not many. They were rather expert at making wooden troughs. These were generally made from the bends of hollow trees which were shaped and smoothed by means of a knife. These troughs were employed partly for the collection of mussels, partly also for the gathering of the 'nalgoa' or small ground tuber, which in the dry season constituted their main supply of vegetable food. And these troughs were carried in a sling over one shoulder. The troughs were also employed in a special way as cooking vessels, being filled with a mixture of live coals and nalgoas, the whole being gently shaken until the coals were dead and the nalgoas roasted. By means of a 'bailer shell' the cooling mess was gradually scooped up and allowed to drop towards another trough. The coals, being lighter, were blown away by the wind, and the heavier nalgoa fell into the trough. In a very short time they were thus able to sift the whole mess of nalgoa, a food which, by the way, was by no means unpalatable.

The physique of these natives was very similar to that of the northern tribes. As a rule the men were exceedingly well built, being never plump or fat, and their muscles and sinews appearing as if cast from some dark metal. They seemed perhaps to be a little more heavily built than the average native of Arnhem Land, though they were not as a rule taller than the coast natives of that land. Their features as a rule were ugly, but the shape of the skull appeared somewhat nobler than in the tribes I had visited in Arnhem Land. At all events, I cannot remember having seen such low types in Dampier's Land as I frequently met with in the north. And sometimes types almost of beauty might be met with. The following

drawing, representing an old black from Hill Station, seems more reminiscent of a Caucasian than of a savage from the Antipodes.



Fig. 17.

OLD NATIVE, HILL
STATION.

The men's apparel or ornaments were exceedingly few and simple, in the main consisting of the usual hair belt from which dangled by a string a 'figleaf' made from the common pearl shell (*Meleagrina margaritifera*), which was generally grotesquely carved. But this 'figleaf' was just as often dangling at the side or behind as in front, and appeared to be present as a kind of excuse for the lack of clothing and not for the purpose of decency. Around the head they generally carried a brow-band, which caused the whole wealth of their dirty hair to resemble some kind of brush-shaped composite flower.

The women were usually of inferior build, very small and surprisingly ugly. They partly

covered their nakedness by means of loin-cloths, rags of European origin, and crosswise on the back and between the breasts they carried a small harness-like ornament made from fibres, exactly like the ornaments seen on the women in Arnhem Land. Besides a few bangles these were their only 'clothing.'

The women who had lost children by death had the custom of smearing clay into their hair. This clay entirely filled the hair and was shaped in more or less pear-shaped lumps which were smeared with fat and ochre. These abominable signs of sorrow were carried during the rest of life and hung dangling about the ugly faces. Unless very young, most women exhibited this feature and, judging from this, the early death of children would appear to be common among these people. (See Fig. 20, p. 295.)

The number of women appeared to be smaller than that of the men, and only at an advanced age, probably thirty years or more, had a man the chance of obtaining a wife. This circumstance had necessitated a code of sexual morals which was very low according to our standards. The adult individuals who were prevented from marriage obtained satisfaction of their sexual desires in unnatural ways, sodomy for instance being commonly recognised. To every grown-up man was allotted a younger boy, ten to fifteen years old, who was his constant companion. The little boys consequently had a wholesome terror of grown-up unmarried men.

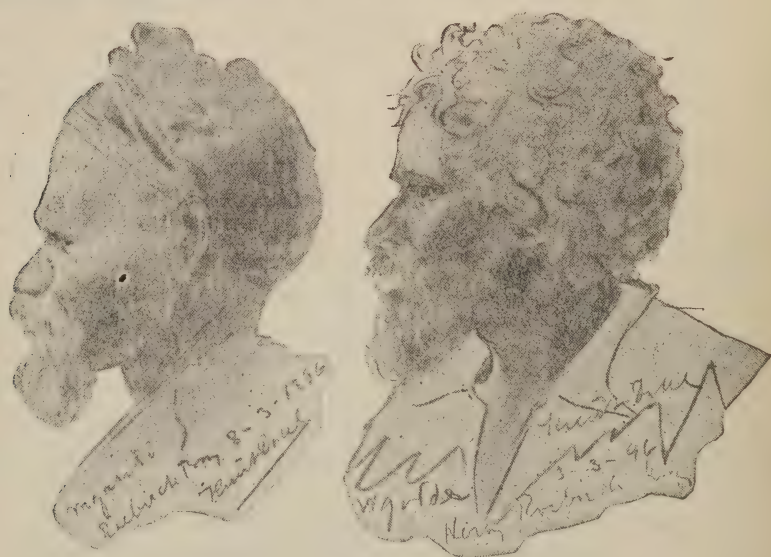


Fig. 18.

NATIVES AT HILL STATION.

Adultery of course occurred, but probably in a far more limited degree among the 'uncivilised' blacks, while the morals of married native women among the blacks at Roebuck Bay, where everything depended on the black and white pearlers, were utterly corrupt.

Most of the quarrels and fights consequently originated from violations of the rights of married men. I have several times witnessed such quarrels which were settled

after the same fashion as in the north (see the account of Tommy's abduction of the promised girl at Mount Shoe-bridge in the rainy season). The injured person and his friends arrange themselves in a row, while the culprit stands about twenty to thirty yards away, facing them. All are armed to the teeth with shields, clubs and boomerangs. The culprit makes a speech of defence and in defiance suddenly sends a missile towards one of the offended party. The throw is immediately returned from one or two persons

on that side. As a rule every throw is parried with wonderful deftness by means of the narrow shield. So quick is their eye, so sure are their parries, that these people are not often hit, even if the boomerangs or the clubs arrive with a speed which almost render them invisible to the eye of a white man. Nevertheless, if all the members of the offended party throw their missiles at once it may be hot enough for the lonely sinner, who with lightning rapidity has to parry all the clubs and boomerangs which simultane-

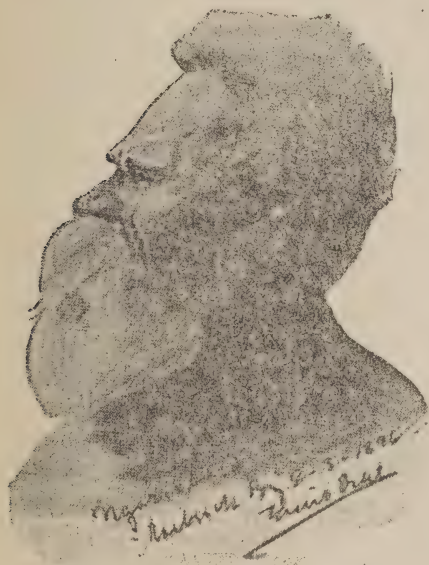


Fig. 19.

NATIVE FROM ROEBUCK BAY.

ously assail him from various directions. Very often he is then wounded, and I deem it probable that there is some relation between the magnitude of the offence and the number of persons who simultaneously have a shot at the culprit.

Chivalry is not strange to their character. The little boys were very often having sham fights with little shields and clubs, throwing and parrying at short distance. If one happened to be accidentally hit so as to be hurt, the lucky 'hitter' immediately ran over to his less lucky opponent

and, proffering his ugly little head, received in return and without turning a hair a good whack over the 'cocoanut.' The sham fight was then immediately continued. I cannot remember having seen the men do this, but I know that a similar custom exists in many parts of Australia, and that the penalty for adultery in some places is said to be settled in this simple fashion.

Their corrobborrees or dances were very similar to those of the northern tribes. There were, however, certain differences in the arrangement of the dancers and also in the festive attire. They excelled in large and monstrous adornments of the head. Prominent among this headgear was a long pigtail, made up of grass straw. This enormous pigtail was fixed to a hood of bark which was lashed to the head, the pigtail rising boldly into the air. During the dance in the flickering firelight this ornament largely added to the peculiar and uncanny character of the dancers, nodding and swaying to their rhythmical steps and tramlings. Besides the white and red colour spots and patterns, which the northern tribes use to decorate their bodies, the blacks of these parts also employed a peculiar decoration, which I have not seen elsewhere. They gathered a store of wool—sheep's, opossum, kangaroo or plant wool—and tufts of this wool were stuck on to the bodies of the dancers in various patterns. These tufts were glued on, and the only glue I have seen used was blood. This blood they were quite pleased to take from their own veins. I can very well remember my surprise when in the sandhills of Roebuck Bay, just before a corrobborree, I ran across a couple of natives who were quite busy bleeding themselves. By means of pointed splinters of bone they had punctured veins on the lower forearm, and both held their bleeding wounds over a large tin measuring almost a quart. And the curious part of the proceeding was the calmness displayed, as in an affair of routine. There was no sign that these men were injuring their own limbs. One of them obviously fancied that he bled too slowly, and taking the bone splinter he pressed it more than an inch deep between the two bones of his forearm. Having moved the splinter vigorously in all directions, he pulled it out, and was

immediately rewarded by a jet of blood a yard long, which he directed into the tin can with the greatest unconcern. The blood was finally staunched by putting

a wooden plug into the wound, at least temporarily. Whether in the end they employed a method for staunching blood which I have heard described from other parts of Australia, I do not know. This method is said to consist in pulling the skin firmly away from the underlying muscles, when a string



Fig. 20.

OLD WOMAN, HILL STATION.

is tied tightly around the wound. In other words, it is tied up like a bag.

Upon my arrival at the station Mr. Marshall had mentioned to me the fact that a salt-swamp or salt-marsh north-east of the station contained peculiar eels which lived in the mud. The blacks captured them by digging deep holes down to their lairs, and these holes had proved so dangerous to the cattle that he had been forced to stop this eel-capture. I had long had the wish to go to this salt-marsh, and as Capewell's camp was situated in the vicinity I did not need much equipment. My work at the station finally permitted me to go, and the following quotation from my journal will illustrate the events of this trip:—

“November 18, 1895.

“In the forenoon I rode out with Capewell to his camp in the paper-bark swamps. Upon arrival he pre-

sented me with a small bandicoot (*Parameles obesula*). One of his blacks brought me a pair of young butcher-birds, and I also shot and skinned a mature cock bird. There were great numbers of black cockatoos (*Calyptrorhynchus Banksii*) in the vicinity of the camp. A great number of bronzewing pigeons (*Phaps chalcoptera*) come to the well in the evening and squat quite tamely on the ground, drinking the water which leaks from the trough.

“When in the evening one creeps through the low melaleuca thicket about the well and carefully peeps through the bushes a peculiar and beautiful scene presents itself.

“The screw-palms which grow beside the well are covered with numbers of black cockatoos. Now and again they emit a sobbing whistle, spreading their blood-red tails. On the fence above the water-trough a flock of white cockatoos are busy climbing down to the water. Moving slowly and deliberately they seem to talk in queer little monologues. And small doves, shining bronze-wings and tiny weaver birds are walking on the ground in a happy and unconcerned medley. Perhaps a kangaroo stoops at the little pool formed by the leakage from the trough, and drinks hastily, repeatedly raising his head and listening suspiciously. If you shoot or suddenly step forth all these creatures disappear with a mixture of shrieks, tramlings and beating wings, and the place appears suddenly dead and desolate. Only the cicadas are heard chirping in the thicket and the leaves of the screw-palm rustle in the gentle evening breeze. And the air is full of a peculiar spicy aroma, like the scent from pine forests, a scent issuing from the tea trees and their dead and fallen leaves.

“Capewell’s house, if this term may be employed for it, is a structure of a kind often to be seen in the Australian bush—a frame of poles with three walls; half of the roof covered with corrugated iron sheets and the other half covered with leafy branches. The walls are made from bushes, and the low roof forces the inhabitants of the house to stoop. A table, *i.e.*, an old door or a box lid on four poles, half eaten by white ants, totters between dilapidated benches.

"Close to the camp in a narrow plain extending along the edge of the paper-bark swamp a number of jungle kangaroos came out to feed at sundown. I took one of the blacks out to stalk some of them, taking advantage of the melaleuca thickets at the edge of the plain. The keen eyes of the native espied almost immediately a small mob of kangaroos, and stalking them behind a small grove of screw-palms I very soon got within easy range. I raised my rifle, and this slight movement caused one of the animals to rise up and intently survey his surroundings. Steadying my rifle on the stem of a screw-palm, I remained stock still until the wary animal again stooped and recommenced its feeding. Then my shot rang out, and, while the rest of the flock made off in enormous jumps, a large old male was left dead on the plain. We continued our search in various plains and glades in the swamp until it got too dark to shoot, but no more kangaroos were to be seen.

"Returning home we walked through the salt-marsh, really an inlet for exceptionally high spring tides, where stagnant sea water stood in pools and where all the paper-barks were dead, a wood of dry and silvery stems encumbered by countless fallen trees and rotting stumps on the stinking and muddy ground. Now and again white salt filled the bottom of dry pools and the swampy soil exhibited a few emu tracks. The landscape was on the whole so barren and desolate and devoid of life that I have seen nothing to equal it, even in Australia. My black companion assured me that these salt-marshes were the right place for the mud-eels which had been mentioned to me, and he showed me a small hole on the edge of a pool due to this eel."

" *November 19, 1895. Capewell's Camp.*

"A great number of black cockatoos came to the camp this morning. During breakfast one of the blacks sitting by the fire shouted to me, pointing to a large emu which quietly stalked past within easy range. I snatched up my rifle, but the grand bird set off at a swinging trot, rendering a rifle shot impossible in the dense bush.

"Having preserved the kangaroo killed yesterday, I took two or three blacks out to look for the much talked-of

mud eels. We walked over to a likely part of the swamp, where the blacks immediately went to work without, however, any result. They examined the puddles by sticking their hands into the eel burrows, feeling about in the almost liquid mud below the surface crust. The crust of firm soil covering the swamp was perhaps upwards of a foot deep. Under this was almost liquid mud, to what depth I do not know.

"One of the blacks found a dead and half-decayed eel, but the specimen was, of course, useless for my purpose. I ascertained this much, however, that the fish was a real eel and not a lungfish related to *Protopterus* and *Ceratodus*, a possibility which I had not hitherto rejected, considering the peculiar surroundings in which the fish occurred.

"Another locality was examined with a somewhat more encouraging result. At the edge of a small plain where some water had collected the boys found a hole where an eel was discovered. The oldest of the men immediately commenced digging for the eel, and when he could not reach deeper with his hands, he stepped into the hole and wallowed about until only his nose was above the surface of the mud, attempting to feel for the eel with his feet. When finally his nose also disappeared below the surface, he yanked himself out of the mud and groaningly declared the eel to have crawled too far under the solid crust. Still another hole was examined without success.

"Suddenly the blacks shouted, "Bone, Bone," and, looking in the direction they pointed, I observed a very long-legged native, who sauntered across the plain towards a clump of bushes, "Him wangibury (understood) plenty to catch eels," said the blacks, and consequently we shouted for him. In the meantime he had disappeared among the bushes. As we approached, however, I saw at a distance a black object bobbing up from a depression in the plain. This proved to be 'Bone,' who was digging for water in an old native well. From the bottom of this well he was, by means of an old 'bailer-shell,' scooping up a brownish and brackish water, which at a pinch might serve as drinking water. The distance to the water was about a yard.

"Bone, who was an old long-legged fellow with a pock-marked face and a muscular system which had the appearance of steel wire, took us into the salt-marsh that I had visited last night. By means of my spade and a 'bailer-shell' he very soon dug out four eels with wonderful dexterity, appearing to work quite instinctively.

"The eel (*Anguilla australis*), which resembles the European eel, lies from eighteen inches to five feet deep in the mud, a passage about one and a half inches in diameter leading from the surface and down to its lair. The eel is exceedingly slippery and its eyes lie very deep, covered by thick, transparent tissue. The place where we found the eels was situated about a mile and a half from the nearest inlet from the sea and upwards of three miles from the coast. The salt-marsh itself was never reached by salt water except at the highest spring tides, possibly only on rare occasions. Now and again, in this locality, we found a large species of crab and several smaller ones in the mud. The soldier crab also occurred.

"Mangroves occurred in single instances in the marsh. The melaleuca or paper-bark was the usual tree. The blacks declared that these eels did not exist in the sea. I only know that they lived also in a swamp further inland which is never reached by the tide.

"The captured eels were placed in a bag with a liberal dose of mud, to keep them moist, and, presenting Bone with some tobacco, we returned to camp. I was very thirsty, having walked for several hours without water, and as we arrived at the well in the shade of the screw-palms my black companion pulled up a bucket of fairish water. Sipped from an old sun-bleached 'bailer-shell' this cool drink appeared to me a delightful luxury. After midday I discovered that one of the eels was already dead, and I at once saw the necessity of taking them to Hill Station in order to preserve them as quickly as possible. About three o'clock I got hold of a young and fresh horse and hoisting the bag to my pommel I rode off for Hill Station.

"The sun about this time was so low that the heat was not very oppressive, and the ride became quite a pleasure. The uniformity of the dry and sandy plain is

enlivened by the dense melaleuca groves through which the track winds along, and where the air is saturated with the fine and spicy aroma of the trees. A cool wind is breathing, and the slanting rays of the sun pour a deep and golden tinge on the thickets and clumps of young trees, and the tops of the old melaleucas exhibit a dense and tufted appearance, reminding one of the pines of northern lands. And these large trees throw deep shadows, so rare in Australia, and this forest emits a sobbing rustle, rising and falling in response to the variations in the current of the air. After an hour and a half I reached the station, left the eels to Holm's care and, having given the horse a short rest, rode off again in order to reach the camp in time to shoot a kangaroo in the evening.

"The little mare went very willingly in the cool evening. Over the wide plains where, in the low sunlight, the shadow of horse and man fell hundreds of yards long, we had a brisk canter. At a well we both had a drink and rode on. The mare was in high spirits; her nose was turned homewards and, alternately trotting and galloping, we rode through the fragrant melaleuca groves and the rugged forest of the dry pindan, and shortly the sinuous plain around our camp lay before us.

"I pulled the horse to a walk in order not to frighten the kangaroos. Riding through low clumps of melaleuca, interrupted by small plains, I suddenly obtained a glimpse of a grazing kangaroo and soon saw it quite plainly. It sat in a stooping position using the tail as a rest and holding the forefeet close to the chest. It stared straight ahead and did not move. So perfect was the 'frozen' posture of the animal that it might easily have been mistaken for a stump or a peculiarly twisted root. The low sun shining straight in my eyes threw a golden sheen on its woolly coat forming a shining halo around the contour of the animal. Motionless, as if petrified, the fine beast sat there as I slowly rode past, feigning not to see it. Only when I was forty or fifty yards away and rode in among some bushes I saw it turn its head, take a parting look at me, and then quietly commence to feed. In the plain where I had shot one yesterday a couple of these animals sat erect at the edge of the forest, observing me

quite fearlessly at a distance of about a hundred yards.

"As soon as I got back to camp I took the rifle and crept up to the same grove of screw-palms, whence I had fired last night. The two kangaroos were still visible from the spot. Upon my arrival one of them rose up, but as I kept quite motionless it stooped to the grass again, giving the screw-palm grove a suspicious glance, however. At this moment I fired, the report echoing sharply under the dense thicket of the swamp, and the animal fell dead, its white belly turned towards me in the dusk. Two or three long jumps took its companion into the protective thicket of the dense melaleucas.

"In this dense melaleuca thicket the animals feel so safe that one may almost walk over them before they move. One does not see them, only their trampling is heard. They only walk a few yards and then settle themselves again. Now and again one may hear them stamping as they forage with utter unconcern. Even the spicy melaleuca leaves are eaten by the animals."

I spent a few days more in the swamps. Sometimes I visited the melaleuca thickets and the small plains, where kangaroos abounded. On other occasions I ranged through the enormous plains where flocks of cranes were seen here and there. But other birds were scarce in the plains. A common species was the small white-headed fish-eagle (*Haliastur girrenera*), which soared above the plains and occasionally settled in the stunted trees of the pindan, where outlying patches of these forests projected into the sandy flats. This little fish-eagle is rare in Arnhem Land, where only on one occasion had I shot a specimen. But further north in the Malayan Archipelago the bird becomes more and more common. The harbour of Singapore, for instance, is teeming with this species, and in the Malaccan harbours it is almost as common as gulls are in northern ports. Everywhere the greedy birds are seen circling and swooping around the vessels with their rusty red wings, the snow-white heads and necks adding to the beauty of their daring flights. On the coast of Western Australia the species was not nearly as numerous as in Malacca, but far commoner than in Arnhem Land.

When I now look back on the days spent in these

surroundings my most vivid impression is the enormous desolation of this wilderness of sand and dry forests. As soon as one went outside the salt-marshes and the mela-leuca thickets there was nothing but the pindan and the vast plains. These plains were as flat as the ocean; one might almost call them an ocean without a swell. Even where there were traces of pools and ponds formed by spring tides or during the rainy season, these temporary lagoons or clay pans were only a few inches deep. The only sign that they had contained water was the velvety but now hardened deposit which very often had a faint coating of minute iridescent salt crystals. In places these crystals might be due to spring tides, but all water in these parts was more or less brackish.

And when the rays of the overhead sun smote the white or reddish sand of the plains or the light salt coating of the wide clay pans, the glare was terrific, almost preventing one from walking with quite open eyes. The enormous heating of the soil, which made it exceedingly painful to walk barefoot, caused a constant current of hot air to rise from the ground, imparting a shimmering movement to the lower layers of the atmosphere. The intensity of this shimmering would cause trees and forests, seen beyond the plains, to appear as objects bobbing and dancing on the waves of a sea.

Strong mirages were always visible on the horizon, and the usual desert view, a deceptive mirage of a blue lake, was constantly visible on the far edge of the plain, always receding as you approached. The shape of the apparent lake might alter as you rode, but to the novice the mirage would always be perfectly deceptive.

At this time we were just at the change of the monsoon and just in the beginning of the 'willie-willie' or cyclone season. Here and there in the plains the whirlwinds would be indicated by tall and sinuous columns of sand and dust rising like enormous swaying snakes towards the cloudless and whitish sky. Not knowing, one might at a distance mistake these columns for the smoke from native fires.

In spite of its desolation this landscape possessed a certain grandeur. There was a peculiar magnificence

in its bleak loneliness, an infinite simplicity in this vast wilderness, where your companion, as he rode away from you, gradually disappeared behind the far horizon of the plain, like a ship on the ocean.

Soon returning to the station, where Mr. Marshall had now arrived, I recommenced my ordinary routine of collecting. One day, as I walked along the shore, I became aware of a strong putrid stench. Just round a point I met two old women groaning under heavy loads of rotten turtle meat. Further along on the beach I found the remains of the turtle, an enormous Loggerhead turtle, the carapace thickly covered by barnacles or acorn shells. The carcass had obviously been drifting in the sea for a long time, as it was in an advanced stage of decay. Close by a dead camp fire testified to the fact that the first happy discoverers had immediately feasted on the putrid meat. The blacks about the station fed on this rotten turtle for two or three days and one could smell them at a considerable distance!

Besides the pindan and the beach, I had another hunting ground which was very interesting and which also largely contributed to our larder. In the sand-bars, between the first and the second bar, a large pond or 'tank' had been dug. The cattle drank there when there was a scarcity of water at some of the wells. This tank, which was situated at a level barely higher than the highest spring tides, exhibited the peculiarity that its water rose at ebb tide, sinking again during high water, a phenomenon which I cannot account for.

In the evening a great number of birds, which wanted water, assembled at this tank. The species were not many, but the few that came appeared in great numbers. These were mainly the white cockatoo—possibly two species—besides the common large bronze-wing pigeon. Upon approaching the tank at sundown I usually saw the sand-hills surrounding the tank covered by hundreds of cockatoos, which fled screeching when I approached too close or when I fired a shot. Very often I would sit down in the shelter of a bush close to the tank, waiting for the arrival of the birds.

The tank was very deep in the middle, and a fence

had been put up to prevent the cattle entering this deep part. Remains of this fence still rose above the water, and the cockatoos would settle on the spars and in their deliberate way would climb down to the water to drink. As the sun sank lower the bronze-wings would arrive by ones and twos, sometimes in flocks, settling on the shore of the tank. They would first look very intently at me, but, as I did not move, they would go down to the water, drink and fly off again. One evening I even made a drawing of the tank and successfully sketched in the birds while they were sitting around me. When

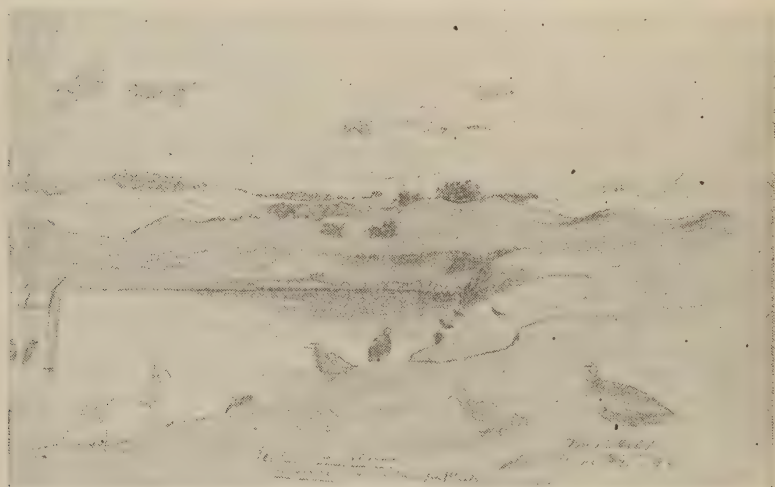


FIG. 21.

BIRD LIFE AT THE TANK.

I wanted food I shot the pigeons one by one as they arrived, or else I sat down in a small defile in the sand-hills, where they almost always passed, and shot them on the wing.

Besides these birds some whistling ducks (*D. vagans*) also visited the tank, coming from a creek further north, where, during the day, they frequented the mangroves. What their business was at the tank I was unable to understand. There was obviously no food for them, as the water seemed almost devoid of larger organisms. But during the night they always visited the tank. Perhaps

they liked the fresh water. This tank was undoubtedly the largest sheet of fresh water (less than a quarter of an acre) in a very wide vicinity, not to say in the whole inland of Roebuck Bay. When it was moonlight we sat close to the tank, shooting the ducks as fast as they arrived. We very often shot a dozen ducks in a couple of hours, being quite satisfied with this bag, which afforded a welcome change to the station fare. They were a great boon to us, these bright and moonlit evenings in the sandhills. The stillness of the night was only broken by the roar of the beach and the whistle of the ducks as they passed us in the dim light.

The days were now a real terror. It was close upon Christmas and still no rain had fallen. The sky was without a cloud and the heat appeared to increase day by day. At last it became quite impossible to walk about in the middle of the day. If the sun shone on one's neck, when stooping for any length of time—for instance, when digging, skinning an animal, or doing similar work—one felt a horrible vertigo upon rising. Fever tried us very sorely. Dampier's Land itself was practically free from fever; but the malaria which we both brought from Arnhem Land sometimes broke out in violent attacks. It could only be stopped by large doses of quinine, which set our poor heads ringing like church bells. No wonder we did not care much for field work during the hot part of the day. We could only make a short morning trip, and in the afternoon we never went out before the sun was low.

The hottest part of the day was spent in the broad verandah, where the sea breeze would bring some coolness. We did various kinds of work, smoked and read. But it was impossible to avoid a certain feeling of homesickness. Before us stretched the blue expanse of the Indian Ocean, washing also the shores of Africa. From that region we had also gazed at this same ocean. From the mountains of Zululand we had often viewed its wide waters, and our thoughts had longingly gone to unknown coasts beyond the sea, which we desired to explore.

Now our thoughts again went beyond the sea, but to a known and homeland harbour. I began in real earnest to prepare to go home. As far as I could judge, the funds

available would hardly cover more than our passage home, and for this reason we packed our collections and went in to Roebuck Bay, where we arrived the day before Christmas Eve, intending to take the first steamer to Singapore.

During Christmas, however, I had a letter from my bank informing me that some further funds had been placed to my credit, which would permit a longer stay. I therefore decided, in spite of our health not being of the best, to see something of the inland parts. The rainy season had now set in, and I was greatly interested in observing its effects on the flora and fauna of this land.

My means not allowing me an outfit of horses, the question of suitable quarters was very important. On the other side of the bay was a small cattle station, but access to it was difficult. About forty miles inland Messrs. Streeter and Co. had an out-station called Loomingoon, where one white man lived. These two were the only places where white men lived for hundreds of miles. I decided for Loomingoon, whither a wagon with provisions was shortly to go up. Two blacks were to drive the team and we were permitted to accompany them.



FIG. 22.

YALVA BURROWS: HILL STATION.

CHAPTER XVI

LOOMINGOON

On New Year's Day, 1896, we started inland towards our new quarters. The track to Loomingoon for forty miles followed the telegraph line, which here crosses Dampier's Land towards New Derby. There were two wells on the road, being the only places where water was to be had, and at the first of these we camped in the evening after a very tiring and dry walk. The wagon being heavily loaded with provisions for the station, we had to walk all day. The driving was bad enough as it was, the wheels of the heavy wagon sinking far into the loose sand of the track. We outspanned the bullocks in the evening, letting them graze in pairs, in the yokes. Holm and I went to bed under the wagon, and the blacks on top of it.

The next morning only four bullocks were to be found. The blacks were sent to look for the remainder, and we never set eyes on them again—the blacks as well as the bullocks completely disappeared. We waited for some days, but, realising that something was radically wrong, we sent a native messenger to Streeter's in Broome. Before new blacks and bullocks could be procured a week passed—a week which we had to spend on the spot, unless we wished to say good-bye to everything the wagon contained.

On the second night it commenced raining, and before long we had several inches of water under the wagon. Rising, we pulled the awning—an old and rotten sail—down on all sides of the wagon, but this proved of small effect. Finally we dug a drain round the whole affair, and this brought some relief from the wet. But we spent a very miserable week. The rain persisted in pouring down. Only on rare occasions did we succeed in lighting a fire of a size sufficient to bake a damper, and after a couple of days we had no food but flour. Water was the only

thing we had in profusion—over, under, and all about us. Well, that week passed also, and, four oxen and two new blacks finally arriving, we reached Loomingoon after two days' sorry driving through illimitable plains, along the edge of the just as illimitable pindan.

The faint trail which we followed passed through a point of the pindan which ran far into the plain, gradually melting away into groves of paper-bark and screw-palms. In a gently sloping hollow in the plain we caught sight of the Loomingoon station. The establishment consisted of a small dilapidated log-house and a few small sheet-iron sheds, of which one was used as a kitchen, the other being occupied by the manager. Besides these, there were some open sheds roofed with leafy branches, and at some distance away were a few leafy huts, the humble habitations of the station blacks.

The dilapidated log-house,* mainly used as a general storeroom, was allotted to Holm and myself. At one end of this house was a small corrugated iron lean-to, and Holm established himself there, while I occupied the main room. In the middle of the earthen floor I made up a bed from three packing cases, on which I placed a sheet of corrugated iron. That was all I had in the way of comfort. Most of the room was occupied by a large stack of flour bags and other provisions. All sorts of saddlery, farm implements, and old refuse were also accumulated in this room. Close to the head of my bed stood an old box containing some scraps of old books. In this box also an ancient hen was sitting conscientiously on one egg. Under the straw-thatched roof half a score of half-tame cats had their stronghold, but I had to chase them out, as they showed a strong partiality for my bird skins. We had no candles or lamps. An old tin full of dripping and provided with a piece of rag for a wick was our only means of illumination in the long evenings.

The house had been built from old and hollow paper-bark timber. There were two portholes for windows, and these were provided with thick wire bars to prevent blacks from entering or flinging spears or other missiles at the innocent sleeper. Around the verandah, the roof of which

* See sketch on p. 271.

had partly fallen in, ran a palisade, about a yard high, made from solid paper-bark poles, which also were meant as a protection against missiles, when anyone was sleeping on the verandah.

In this fashion we lived each in his own house, as it were, and went 'visiting' one another. The 'mess-room' where we had our meals was a large open leaf-shed, where sun and wind were impartially and profusely meted out to us from all quarters of the firmament, according to the whims of the weather. We took turns at the cooking, but Holm generally acted as cook, while the manager, Mr. Hunter, and I were out attending to our work in the bush. In the evenings we kept a large fire going outside the kitchen door, and around this fire we gathered to smoke and chat. The cats would sometimes join us. Maggie, my terrier, rested alongside of me, and a tame Australian crane also formed one of our queer and miscellaneous party. This large bird was quite fond of the fire, and sat silent and grave on his heels, blinking his cold, wise eyes. In fine weather we slept on the 'court,' but when it was windy or raining we had to resort to our respective houses. And the further the season advanced, the oftener we had to sleep under shelter.

My den was by no means comfortable. A wealth of insects and other vermin lived in the hollow logs of the house, and were a constant source of disturbance, and when the rains increased the frogs, which had been hibernating in the hollow logs, woke up and sat croaking all night. There were also plenty of snakes. Every now and again when I rose in the morning I saw the fresh track of a snake which had crossed the floor or even crawled under my bed.

Our work very soon got into the old routine, and our collections increased as the rainy season advanced. A marvellous amount of life now began to develop in this land, which a short time before had been desolate and desert-like. From my observations in the two previous chapters the reader will have got some impressions as to the poor fauna of this district. That is to say, for a tropical country it must be described, on the whole, as very poor. The mammalian species were few, and with a couple of

exceptions none of the species was numerous. The birds and reptiles were the vertebrates that exhibited the greatest variety of species, and among the lower animals the insects were very numerous. But large groups of animals were practically non-existent.

Fish, molluscs and crustaceans appeared to be almost entirely absent from the land fauna, and there was not even a trace of batrachians. The only fish I saw during the dry season was the previously mentioned mud-eel, and the existence of molluscs in the land fauna was only indicated by the presence of the bleached shells of a small land snail. During the dry season there were no crustaceans to be seen other than the inhabitants of the sea shore and its immediate vicinity, for instance the hermit and soldier crabs.

Among the birds the wading and swimming birds were almost totally absent from the land fauna.

As will be seen, the groups or species which were absent were mainly such organisms as are dependent for their existence on water or profuse moisture. And the species present were those which in all seasons could find their living amid these dry surroundings. This was quite natural, as the land, towards the close of the dry season, had the appearance of an absolute desert of sandy plains and stunted forests.

Before Christmas no green straw, except the spinifex grass, was to be seen anywhere. Everything was grey and withered, swept by grass fires, eaten by animals and insects. The trees certainly carried some brownish-green leaves, but all annual vegetation was completely suppressed, annihilated, and the earth was strewn with debris of dry remains of plants, droppings from animals, remains of insects, etc., which mingled with the loose sand of the soil. I had certainly expected the rainy season to produce an alteration. But in these parts the wet season is only of short duration, and the biggest annual rainfall previously registered did not much exceed twenty inches. I anticipated, therefore, that no excessive change could be expected to take place in the character of the landscape and of the flora and fauna. I have never made a greater mistake, and never in my life have I witnessed a more

striking development of flora and fauna than that which took place in this region as soon as the rainy season set in in real earnest.

At Christmas time and during our march to Loomingoon it had rained a good deal, but this rain was immediately absorbed by the thirsty soil, and soon after the rain had ceased and the sun had come out the landscape appeared as dry as ever. Certain signs, however, seemed to indicate that enormous forces were slumbering in this apparently barren soil. Everywhere in the sandhills, in the plains, and in the pindan, minute green sprouts began to appear, almost like what one sees in a sprouting field in Europe.

During our stay at Loomingoon the rains became more and more frequent, until finally it poured day after day with only small interruptions. When these rains were followed by a few days of sunshine the whole land became one steaming hotbed. All vegetation shot up with incredible rapidity. Very soon the grass stood as high as a man between the trees of the pindan. The leaves of the forest took on a luscious blue-green colour, and in the plains, and along the shores of temporary lakes, grasses and water-weeds sprang with irresistible force from soil which a couple of weeks before might have been that of the Sahara desert.

The heat was intense, and the temperature in the shallow waters rose to an extent undreamed of. Unfortunately my thermometers had been destroyed, but it may give an idea of the excessive temperature when I say that it was actually painful to put one's hand into these pools, just as it is when the water is too hot in a bath. The water had a brownish tint and violent decompositions probably took place in the organic débris derived from the surface of the land.

In a surprisingly short time an enormous wealth of lower organisms developed. The water was soon teeming with minute crustaceans, mainly belonging to *ostracada* and *phyllopoda*. Everywhere the small ostracods swarmed, and phyllopods, among these especially a large species of *apus*, simply swept the waters of the shallow lakes.

As the rains increased the toads and frogs came to

life. During the dry season there had been no sign that they even existed. But now almost every hollow tree appeared to contain them, and their nocturnal croakings overpowered every other sound of the night, even the eternal song of the cicadas, which had previously dominated the dark hours of these tropical regions. Multitudes of these frogs were now spawning in these waters, and in a very short time the pools were teeming with tadpoles, which covered the bottom everywhere like little black peas, and sometimes occurred in such numbers that the water appeared almost solid with them. This latter case was of course exceptional, and mainly occurred when the volume of the pools or lakelets had shrunk considerably.

As this wealth of lower organisms developed, a vast variety of birds arrived in order to feast on this easily obtained food, and also to breed in the profuse vegetation along the shores of the temporary lagoons. And, as the waters of the plains increased in area and the wealth of lower organisms was augmented, the number of migrating birds also grew, until the whole landscape finally teemed with a life as overwhelmingly prolific as I can remember ever seeing anywhere. If anybody had seen this land as it was a month ago, had fixed its appearance firmly in his memory, and then after the interval had suddenly been faced by the same landscape in its altered appearance, he would have said that the whole thing was a deception, a lie, a shameless and elaborate lie which almighty Nature jestingly wanted to impose upon him.

Some weeks ago these plains were a desert. Dry and fine sand rose in little clouds at every step of the horses, while the wind swept the sand away and played with the dry *débris* of the withered vegetation. Now it might happen that grass and rushes rose higher than the saddle as one rode among chains of glittering lagoons, and every step of the horses might flush a profusion of waterfowl. Now a flock of quacking ducks would rise, now the large blue *porphyrio* would raise their blood-red beaks above the green weeds and look with surprise at the rider. Countless snipe, stints and sand-pipers would sweep like light clouds through the air, and beautiful rails would slip shyly through the rich vegetation about the steaming waters.

I shall not weary the reader with a description in detail of the incredible number of bird species now to be met with, only giving prominence to the fact that almost all of them were species which during the dry season were entirely absent from these parts. In other words most of them were migratory birds. And practically all the lower animals which formed their food were species which, though they certainly existed during the dry season in some state of torpor or quiescence, had merely been awaiting more favourable conditions for their proper life. In the case of some of these forms, for instance the batrachians, they had simply been lying hidden in a torpid state, but in the case of others the state of quiescence was more complicated. The smaller crustaceans, as an example, which in their fully developed state are unable to do without water, existed during the dry season only as eggs, which lay embedded in the sand, unable to develop before the rains came. This was previously known in other regions from the writings of Lumholtz and Professor O. Sars. That such was the case here also I proved by collecting the bottom deposits of dry clay pans, from which Professor Sars after my return succeeded in hatching several generations of these smaller crustaceans, which were mostly unknown to science, and which have been described by him in several papers in *Archiv for Mathematik og Naturvidenskab*, 1896.

The phenomena which I have here outlined will on the first impression appear strange and unfamiliar. But really it is only what every man annually observes in Northern Europe. In other words it is nothing but the change from winter to summer, from quiescence to active life. Only the agencies which are instrumental in this change are different in cold and hot climates, and we are not accustomed to consider summer and winter in a tropical climate as seasons of great contrasts.

In the high latitudes almost all terrestrial life is torpid during the cold season, comprising the main part of the year, because cold stops the activity of most organisms. Those which are able to do so migrate, and only animals that are independent of temperature changes continue an active life during winter. When summer, with rising

temperature, wakes these quiescent organisms from their torpid state the migratory birds return to feed on the flourishing lower organic life and to breed.

In Western Australia, and also in many other tropical lands with periodical dry and rainy seasons, the *drought* is the main factor in necessitating the torpid state. Only the advent of the rainy season is instrumental in the reawakening of the organisms and the culmination of life.



Fig. 23.

KANGUDD GIRL, ABOUT 20 YEARS OLD. LOOMINGOON.

To us this profuse animal life was a great advantage. We did not need to go far for our specimens. We had only to take our guns, walk for a couple of hours, and make the desired selection from this varied multitude of birds. We might either walk through the melaleuca groves and the grassy plains and shoot the rising birds, or we might build a comfortable leaf hut at the edge of a lagoon, and take our choice from the birds which settled on the water.

It was also a real blessing to have all this splendid food store just at our very doors. We might decide to have ducks for dinner and go out and shoot them a few hundred yards from the house. Otherwise we had nothing to eat but salt meat and bread. We shot a bullock now and again, when our store of meat ran low. Then we enjoyed the

luxury of fresh meat for one or two meals and afterwards had to tackle the eternal salt junk again, salt meat for

breakfast, dinner and supper, salt junk and bread to all eternity! We had no flock of piglets which could provide us with a change of food, as had been our luck at Hill Station, and therefore the ducks were a real boon.

However numerous the ducks were, the shooting of them always entailed some loss of time. For this reason we sometimes worked on a larger scale, going as far afield as a bigger pan or lake, named 'Idarr.' At this lake we sometimes made large bags of ducks, mostly 'whistling ducks,' which were most plentiful. I remember once bagging about two dozen of these fine birds with nine cartridges. The ducks which we could not eat fresh were split open, and when salted and smoked they provided an excellent store of food. They were so good, indeed, that we all agreed they ought to be served with vegetables. These were promptly procured by Mr. Hunter. Resorting to the bush he shortly returned with quantities of herbs resembling the dead nettle, which we boiled in bunches, and which were excellent eating.

A couple of cows with calves were also a source of comfort. Every night we drove the cows into the yard, separating them from the calves, and every morning we enjoyed a little fresh milk with our tea, a luxury very rare in the rougher parts of Australia.

Although our living in the main was very simple, and although we had to do without most of the food and drink which civilised man usually considers

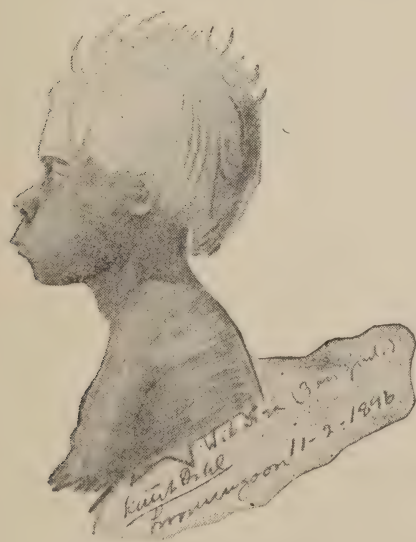


Fig. 24.

WIBARRA BOY, ABOUT 3 YEARS
OLD. LOOMINGOON.

indispensable, I cannot say that I missed the comforts of civilisation. To *do without* finally becomes a habit, and thousands of white men in Australia have to live in the same monotonous fashion as we had to put up with. As a proof of what one may get used to I may record that our drinking water, during most of our stay at Loomingoon, was very brackish. The first heavy rains caused a certain amount of water to collect in clay-pans in the plains. The cattle then left the artificial wells and drank anywhere. The consequence was that the wells were disused. The water accumulated in them and became more and more saline. The water in the plains was also brackish, owing to the soil containing so much salt. But these facts did not cause us any inconvenience. Little by little we got used to the brackish water. In order to obtain a really fine drink, we once collected some rain water from the roofs. We found it, however, flat and insipid, and went back to our old and tasty water from the well.

The rains increased tremendously during February. Day after day all work was stopped, and when the sun came out again we had to wade through the plains in order to get at our game. On rainy and windy days the blacks, feeling cold and miserable, would come up to the house to beg or talk. My camera being out of order, I amused myself making a large number of sketches of these children of nature. They had a very keen eye for pictures, and when shown the finished portraits they would laugh uproariously, naming the person portrayed.

The life of the natives during this season was, however, a miserable one. Their engagement as 'well hands' was temporarily cancelled during the rains. Only now and again they were given a little food and tobacco, just enough to induce them not to leave the vicinity of the station. But many of them at this season wandered towards the east, further inland towards the unending 'never-never' land, where travelling was now possible owing to the presence of water. Very few, if any, white men had ever penetrated into those eastern forests, and the few attempts made had been disastrous. In the dry season no water is to be had, and during the rains the

horses sink into the water-logged sandy soil. On foot and with black guides one might perhaps have gone some distance into this unknown land. I considered the matter for some time, but gave up the idea. For me there would be nothing to gain. The nature of the land would surely be similar to that of our present surroundings, and animal life was in all probability the same. And neither Holm nor I were in at all good health. The fever attacked us every now and then.

Off and on the weather cleared up for a short period, the lakes would drop, and it became possible to get about. But the atmosphere was continually unsettled. Mighty clouds would in a moment gather in certain quarters of the heavens. Cyclones would twist them into queer and gigantic shapes, exhibiting quaint and beautiful colours, changing from the deepest blue-black to the copper and flaming gold of sunlit thunderclouds.

These enormous masses of

clouds looked almost as if they were fighting one another, as they swelled up above the low horizon of the plains, the brownish-green 'ocean' which surrounded our lonely abode. Now and then a rift in the clouds would reveal a heaven blue as the Indian Ocean. Then the clouds would close in, shutting out the fierce sunlight



Fig. 25.

KAMAGIN GIRL, 4-5 YEARS
OLD. LOOMINGOON.

and letting loose a tempest of wind and rain which would pour tons and tons of water on to the flat and thirsty earth.

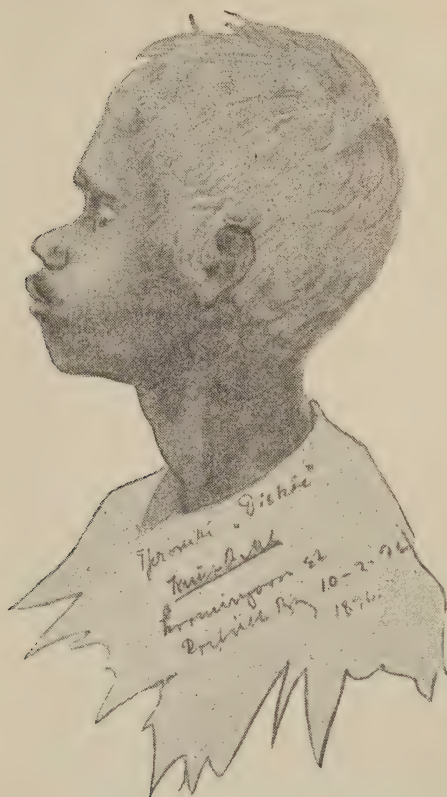


Fig. 26.

TJEROMBI BOY, ADOLESCENT.
LOOMINGOON.

Heavens, how it blew and rained! And the nights were the worst time. It rained as it had never rained before in the era of white man in these parts, and we began to find our position very uncomfortable. We had had a letter by runner from Roebuck Bay. At that place they had already registered much more than the normal rain-fall of a season, which was about twenty inches, and the rain-fall at Loomingoon had certainly not been less. We consequently thought that we had seen the worst of the rain. But we were quite wrong. It only rained harder than ever. It rained as it probably did during the great and original

deluge. For three days and nights we sat in our respective dens listening to the storm and downpour. The water came down without ceasing from night to morning and from morning to night. It did not come in drops, or in jets, or in buckets. It rained in sheets. In three days we registered—by means of a tin can and an inch rule—about thirty inches of rain-fall! The water in the plains rose right up to our houses, which were situated

on quite a respectable slope. As far as we could see towards the coast, there was nothing but water in view. Ships could have navigated the plains. Our eating-shed blew down and crushed everything in the 'dining room.' A good job we weren't there! The soil got absolutely sodden—to such a degree that my log-house began to sink. A trickling spring issued from under my bed. When I got out of bed in the morning, I sank into the bog up to my knees. My companions were not much better off, and everything we possessed was wet, dripping wet, day and night.

Still, it did come to an end at last, and we were able again to move around the houses and on the higher pindan. Everywhere the signs of destruction were plain to view. Half of the sheds and houses of the station were down, and the material damage done by the rain was no small tale.

Just as the rain had proved able to wake everything in this land to a new life, so it now proved a bringer of death. That most of our fowls and also a foal, which was running about the place, had been killed by the wet was a mere detail; but even many of the yalvas, or kangaroo rats, had been destroyed. The soil being absolutely soaked, all the burrows of the yalvas had collapsed, and the animals had been forced to live on the surface of the earth. Great numbers had

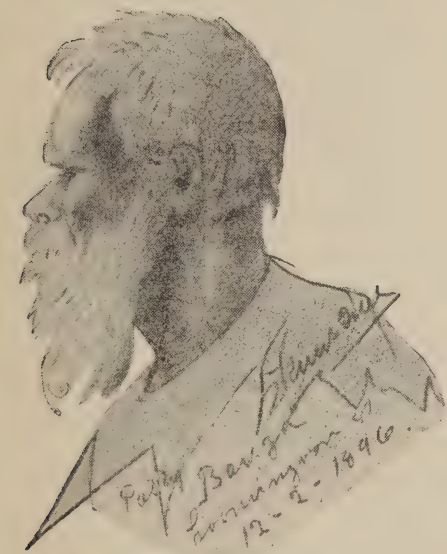


Fig. 27.

BANGA MAN, MIDDLE-AGED.
LOOMINGOON.

been killed by the rain. Thus in one day the native women found more than a dozen dead yalvas in the immediate

vicinity of the station, and the dogs took many of the survivors, a total of twenty yalvas being that day brought into the camp. The rains had thus been the occasion of unusual phenomena, and this was also to be expected. The fall had already been more than double that of a normal year. Even the birds of the ocean were induced to come inland, owing to the exceptional inundations. We thus observed flocks of frigate birds passing over us, forty miles from the sea.

These conditions did not encourage further work, especially considering our bad health. I deliberated on this question for a couple of days and then, with a clear conscience, decided to go home. I knew that my collections represented the higher animals of North-Western Australia in a quite exhaustive manner. I also knew that they contained numerous hitherto unknown animal forms, and I felt convinced that these exhaustive collections from a region very little known or examined would prove well worth the toil spent in their accumulation.

The plains were still inundated, but we hired all the blacks we could muster and, distributing our belongings on their thick heads, set off through the desolate ridges of pindan, which as a rule rose a little above the floods. Even so, we had sometimes to wade for miles, and in the evening we only just managed to find a dry place for our camp. The next morning I had a roasted bandicoot for breakfast, and this was the last of my many savage meals. During the day we managed to splash in to Roebuck Bay.

A week later we stood on the deck of the *Saladin*, steaming out of the bay and going north and home. We landed in Kristiania, after more than three years' absence, on the 4th of May.

THE END.

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